DOCUMENT RESUME

ED 367 223 HE 027 188

AUTHOR Scheetz, L. Patrick
TITLE Recruiting Trends 1992-93: A Study of Businesses, Industries, and Governmental Agencies Employing New College Graduates. 22nd Anniversary Edition.
INSTITUTION Michigan State Univ., East Lansing. Career Development and Placement Services.
PUB DATE 4 Dec 92
NOTE 90p.
AVAILABLE FROM Collegiate Employment Research Institute, 113 Student Services Building, Michigan State University, East Lansing, MI 48824-1113 ($25).
PUB TYPE Reports - Research/Technical (143) -- Statistical Data (110)

EDRS PRICE MF01/PC04 Plus Postage.
DESCRIPTORS Business; *College Graduates; *Employer Attitudes; Employment Interviews; Employment Opportunities; *Employment Projections; Higher Education; Industry; Labor Force; Labor Market; *Personnel Needs; Public Sector; *Recruitment; Salaries; *Supply and Demand; Surveys; Trend Analysis

ABSTRACT

This report examines expectations of employers hiring new college graduates for the 1992-93 labor market, based on a survey of 504 organizations. Survey questions focused on: anticipated changes in job market demand and hiring trends for new college graduates; expected starting salaries; campus recruitment activities; salaried employees in overseas locations; minorities, women, and foreign nationals hired for 1991-92; new hires with no experience last year; international placement programs; reorganization activities and results experienced; advice for new graduates who cannot find jobs; shortages of qualified women and minority candidates; anticipated change in starting salary offers; estimated starting salary averages; offers of "parachutes" to new college graduates; campus visits last year and expected this year; new and emerging occupations; job categories yielding most employment opportunities; compensation plans and retirement benefit packages; characteristics of outstanding job prospects during interviews; thank you letters after interviews; offers of employment extended and accepted; average cost of recruiting and hiring; background checks; impact of the desire to attend graduate school; preparation needed from college experiences; deficiencies found after hiring; effectiveness of affirmative action/equal opportunity programs; sexual harassment policies; Americans with Disabilities Act; testing of new college graduates for drug and alcohol use and acquired immune deficiency syndrome; and employment opportunities by geographical locations. (JDD)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED 367 223

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

L. Patrick Scheetz

Michigan State Univ

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☑ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

BEST COPY AVAILABLE

22nd Anniversary Edition

RECRUITING TRENDS 1992-93

A Study of Businesses, Industries,

and Governmental Agencies

Employing New College Graduates

By

L. Patrick Scheetz, Ph.D.

Director
Collegiate Employment Research Institute
and
Assistant Director
Career Development and Placement Services

MICHIGAN STATE UNIVERSITY
Vernicka K. Tyson, Acting Director
Career Development and Placement Services
113 Student Services Building
East Lansing, Michigan 48824-1113

Price: $25

Career Development and Placement Services
is a Division of Student Affairs and Services

MSU is an Affirmative Action/Equal Opportunity Institution

ACKNOWLEDGMENTS

For the extra efforts extended by **so many employers** who graciously responded to this year's Recruiting Trends survey or follow-up telephone calls, I thank you. In the midst of your busy schedules, another survey was really not needed, but your responses were critical for an accurate assessment of the current job market for new college graduates. For all your help, please accept my thanks.

Many other people also contributed to the completion of this publication. **Mr. John D. Shingleton,** Director Emeritus of Placement Services and current member of the Board of Trustees at Michigan State University deserves special thanks. Jack co-authored this report with me from its inception through the first 17 years, and he once again reviewed questions for this year's survey and offered comments on the final report. Thanks, Jack.

Thanks are extended to **Pat Walz,** Graduate Research Assistant of the Institute, who provided computer programming and statistical analyses for this publication. In addition, **Phil Gardner, Ph.D.,** Research Administrator, and **Diane Johnson,** Secretary, of the Collegiate Employment Research Institute, supervised personnel working on data entry. Two student assistants accomplished yeoman duty: **Kathy Manning** with data entry, and **Lynn Ashe** with typing and sorting of comments received.

Several members of the Career Development and Placement Services staff at Michigan State University were also helpful. Especially appreciated were the support of **Vernicka Tyson,** Acting Director of Career Development and Placement Services; editing recommendations from **Lynne Zelenski,** and assistance with questionnaire development from **Tony Rogalski, Jane Miller, Jennifer Leedy, and Robert Poole.** For their suggestions, special thanks are extended.

Supervision of the clerical staff and student employees was capably accomplished by **Carmen Scott.** Assistance with telephoning employers and editing of the final report were graciously provided by **Katie Slade** and **Liz Considine.** Mailing of questionnaires, follow-up letters, and records maintenance were accomplished by **Susan Hoyt, Susan Roggenbuck, Carla Shultzburg,** and **Trudi Faucher.** Printing of all materials connected with this project was completed by **Chris Sweeley.** The cover for this report was designed by **Jennifer Guerin.** Thanks crew.

Most of all, please permit me to thank my family: **Janet,** my wife; and our children, **Dominique, Michael and Danielle.** Even my mother, **Mrs. Mary Margaret Scheetz,** helped with editing. This research effort detracts from our Thanksgiving holiday each year, so their understanding and consideration of the importance of this project are appreciated too.

To those who assisted with this project, but were inadvertently overlooked, please accept my apologies. A task of this magnitude could not be accomplished without help from many individuals. Thank you to all who assisted.

L. Patrick Scheetz, Ph D.
Price: $25

Copyright: December 4, 1992
Michigan State University

TABLE OF CONTENTS

	Page #
Summary of Recruiting Trends 1992-93	iv
Major Employer Categories- Hiring Trends	1
New Hires Last Year and Anticipated Hires This Year	2-3
Employer Categories and Sizes of Respondents	4-5
Salaried Employees in Overseas Locations	6
With Disabilities	7
Laid Off Last Year	8
Minorities Hired Last Year	9
Women Hired Last Year	10
New Hires with No Experience Last Year	11
Foreign Nationals/U.S. Citizens Hired Last Year	12-14
International Placement Programs	15
Reorganization Activities and Results Experienced	16-18
Anticipated Changes in Job Market Demand	19
Advice for New Graduates Who Cannot Find Jobs	20-22
Shortages of Qualified Candidates, Women and Minorities	23-27
Changes in Recruitment Practices	28-29
Recruitment Programs for Entry-Level Personnel	30
Most Serious Problems for Recruiters	31-32
Job Openings Anticipated This Year	33
Anticipated Change in Starting Salary Offers	34
Estimated Starting Salary Averages	35
Offers of "Parachutes" to New College Graduates	36
Campus Visits Last Year and Expected This Year	37
New and Emerging Occupations	38
Job Categories Yielding Most Employment Opportunities	39
Compensation Plans and Retirement Benefit Packages	40-41
College Graduates Interviewed and Hired	42-44
Characteristics of Outstanding Job Prospects During Interviews	45
Thank You Letters After Interviews	46
Offers of Employment Extended and Accepted	47-51
Average Cost of Recruiting and Hiring	52
Background Checks	53
Desire to Attend Graduate School: Its Impact	54
Preparation Needed from College Experiences	55
Deficiencies Found after Hiring: What then?	56
Effectiveness of Affirmative Action/Equal Opportunity Programs	57
Sexual Harassment Policies	58
Americans with Disabilities Act (ADA)	59-60
Changes in Work Environment and Influences on Qualifications for New College Hires	61
Testing of New College Graduates-Drug Testing, Alcohol, and AIDS	62
Employment Opportunities by Geographical Locations	63
Index	64
Employers Surveyed	65

Summary of

RECRUITING TRENDS 1992-93

A Study of 504 Businesses, Industries,
and Governmental Agencies
Employing New College Graduates

This summary of the 22nd anniversary edition of the Recruiting Trends survey reviews expectations of employers hiring new college graduates for the 1992-93 labor market. A total of 4,494 employers were invited to participate and represented (1) members of the College Placement Council or a regional placement association, (2) employers registered with Career Development and Placement Services at Michigan State University, and (3) employers randomly selected from a list of small businesses in the Standard and Poor's Register. Surveys were initially mailed first-class to employers on September 21, 1992, with follow-up reminder notices mailed first-class on October 30, 1992. Follow-up telephone calls were placed to selected major employers from November 2-18, 1992.

Data from this survey are quoted by many prestigious news media including ABC's Good Morning America; CNN's national and overseas news services; the NBC Nightly News with Tom Brokaw; USA Today; The Black Collegian; WJR radio in Detroit; KOA radio in Denver; ABC and CBS television and radio stations throughout the country; and numerous magazines and newspapers nationwide.

Responses were received from 554 organizations (13.3%), and 504 of these were complete enough for statistical analysis purposes. This sample adequately reflects the expectations of organizations recruiting on college and university campuses in 1992-93.

Of this year's respondents, 461 were businesses, industries, manufacturing organizations, and service sector employers (91.5%); and 43 were local, state, and federal government agencies and the military services (8.5%). (Pages 4-5)

Questions this year focused on anticipated changes in hiring trends for new college graduates, expected starting salaries, campus recruitment activities, and other topics of interest to human resources administrators, placement officers, career counselors, faculty, and students. Open-ended questions were included, so surveyed employers could provide comments on topics such as: advice for new college graduates without jobs since graduating six months ago, shortages of candidates for available job opportunities, changes in recruitment practices, most serious problems faced by campus recruiters, "parachutes" offered with benefit packages to protect against downsizing, new and emerging occupations, changes caused by the Americans with Disabilities Act, and policies on sexual harassment.

Job Opportunities for the Class of 1992-93

The past three years have seen consistent drops in the number of new college graduates hired by employers throughout the United States. However, new college graduates in 1992-93 should experience less decline in job opportunities. While graduates still face a tight job market, the decrease in hiring quotas, just 2.1% from 1991-92 to 1992-93, is substantially smaller than decreases of the past three years: 10.0% in 1991-92, 9.8% in 1990-91, and 13.3% in 1989-90. (Pages 1-3)

It is difficult to draw irrefutable conclusions from data provided by employers responding to this survey. Nevertheless, 1992-93 graduates can find hope in the fact that substantial additional erosion is not expected, and furthermore, some improvement is anticipated in late 1993.

If the economy is turning around, as some economists speculate, this improvement has not yet reached the job market for new college graduates. Since the decline this year is not expected to go much deeper, there are job opportunities available for new college graduates among selected employers.

While hiring decreases in 1992-93 are beginning to stabilize, new college graduates must be as flexible, organized, and devoted to job hunting as ever if they hope to find suitable employment. Patience and persistence are crucial in any job campaign--especially in times of economic instability. Dedication is also essential. For example, employers reported visiting fewer campuses than in the past. Therefore, graduates must be willing to work harder through other sources to obtain interviews and gain opportunities to prove themselves. Often, one person's extra effort can help an employer make an otherwise difficult decision between several equally qualified candidates.

Various changes in recruitment strategies are expected to affect the job market for 1992-93 college graduates. Along with visiting fewer campuses, recruiters are expected to place more emphasis on applicants' prior career-related work experiences and job performance competencies. To help new employees develop on-the-job skills and abilities, employers are planning to increase their use of internal training programs and promote more management trainees within the organizations. Because of this trend, employers are becoming much more selective about their new hires; for example, some organizations would not even consider an applicant without at least a 3.0 GPA.

Other important advice for a new graduate seeking employment is to remain as open minded and adaptable as possible. With today's unpredictable economy, graduates may not always find a position in an area directly related to their academic major or field of study. However, as long as they are willing to accept employment in occupations and/or entry-level positions they might not have otherwise considered, most should be able to survive the currently depressed job market.

Hiring Quotas for This Year (1992-93)

According to businesses and industrial organizations responding to this year's survey, a decrease in hiring projections of 7.0% can be expected. Last year, businesses and industries projected a decrease of 1.9%. For federal, state, and local government agencies and the military, employment opportunities are expected to decrease 0.9%. Last year, a projected decrease of 20.7% was anticipated by government agencies. (Pages 1-3)

Although an overall decrease in hiring is expected this year, pockets of job openings will exist, varying considerably for different occupational areas and employer categories. Caution needs to be taken when interpreting data for individual employer groups, because of occasionally small sample sizes. Figures reported in this publication best reflect the market for the organizations responding to this survey.

Advice for New Graduates Who Cannot Find Jobs

For new college graduates who have not found available or suitable job opportunities when hunting for more than six months after graduation, surveyed employers offered advice. (Pages 20-22)

Most important, according to employers, was the recommendation that recent graduates continue to search, keep on trying, not give up or get discouraged, and be patient and persistent. Employers advised recent graduates to search harder, especially in areas not directly related to their major field of study.

Reevaluation of their job search techniques and strategies was also advised. New graduates must learn to market themselves more effectively, become more aggressive in their job searches, and be prepared to present their best face to prospective employers.

Gaining further career-related work experiences might increase the new graduate's chances of finding employment. Any experience is better than none, according to employers, and maintaining even a part-time position demonstrates the individual's ability to work and hold a job. Other work experiences recommended by employers included volunteer positions, unpaid work assignments, and internships to get a foot in the door.

Graduates should try any reasonable job available in their field of interest to gain experience and build a list of references. Take any position with a company employing your major or accept a position at a lower level in a stable, reputable organization. In time, you can work into your preferred area of employment. Many college graduates have taken positions at lower than desired levels and been promoted as reward for outstanding job performance.

Be willing to take anything you can get, even if it is not in your field of study, at least on an interim basis. This will show you are trying. Start to work. Do something. Even part-time or temporary positions were suggested as avenues for landing full-time employment. An employer will likely prefer a person who has been steadily employed over one who has been unemployed for six months or more. Therefore, any work experience is more valuable than no experience at all.

Redefine your career goals and expectations. Lower your sights. Establish short-term as well as long-term goals. Show a positive attitude. Expand your scope of interests to a broader market.
Become an entrepreneur, and start your own business.

Sign up with a temporary agency to become employed on long- or short-term assignments. Working for a temporary service will permit you to see available opportunities inside several organizations.

Network yourself into a full-time job. Make personal telephone calls to schedule informational interviews. Join professional organizations related to your field of study and keep updated on current trends in your field. Utilize all resources and contacts: former employers, intern supervisors, faculty, family, friends, alumni, and other graduates who have found jobs.

Utilize assistance from your college placement office or career center. Seek professional opinions to rate your true marketability. Work with a career counselor to assess your skills and job campaigning techniques. Be willing to make adjustments as necessary.

Keep all options open and be flexible about geographical location, starting salary, travel, and entry level assignments, advised employers. Broaden your fields of search.

Take a look at small to medium sized firms. These organizations rarely fill their entire hiring projections with new recruits each year.

Return to graduate school or continue your education to make yourself more marketable. Acquire new skills or train for a new career area (i.e. nursing, engineering, accounting, sciences, etc.). Graduate school is an especially attractive option if you can see a direct employment benefit from an advanced degree. However, a graduate degree without work experiences may make you seem too expensive for some employers to hire.

Starting Salary Averages and Anticipated Increases

Starting salary offers for new bachelor's degree graduates are expected to vary substantially between academic majors.

Highest among starting salaries this year for bachelor's degree graduates are expected for chemical engineering ($40,173), mechanical engineering ($35,619), electrical engineering ($35,141), industrial engineering ($32,574), computer science ($31,572), civil engineering ($29,592), nursing ($29,452), and physics ($29,367). (Pages 34-35)

The greatest increases in starting salary offers this year are expected for marketing/sales (1.3%); civil engineering (1.3%); hotel, restaurant, and institutional management (1.2%); computer science (1.2%); physics (1.2%); MBA's (1.2%); general business administration (1.2%); and liberal arts/arts & letters (1.2%).

Job Opportunities by Geographical Region

Again this year, for the fourth consecutive year, employment opportunities for new college graduates are expected to remain quite competitive in all geographical regions of the country. This evaluation was based upon the experiences and judgment of surveyed employers. (Page 63)

Job availability was expected to be somewhat better in the southeastern (60.1%), northcentral (60.1%), and southwestern (50.5%) regions of the United States. The more competitive job markets for new college graduates were expected in the southcentral (44.4%), northwestern (39.6%), and northeastern (38.3%) regions of the country.

A year ago (1991-92), "medium" ratings were indicated for the northcentral (71.4%), southeastern (67.9%), southwestern (66.9%), southcentral (54.1%), and northwestern (50.2%) regions of the United States. Low availability of jobs for new college graduates was expected in the northeastern (42.3%) region of the United States.

Job Openings Anticipated This Year

For job openings anticipated this year (1992-93) in surveyed organizations, the following academic majors were requested most frequently. These academic majors are listed in alphabetical order with frequencies of response noted after each: (Page 33, 39)

Accounting (55), chemistry (15), chemical engineering (22), civil engineering (12), computer engineering (8), computer science (28), data processing (13), electrical engineering (59), engineering- all categories (18), finance (19), general business administration (40), hotel/ restaurant/ institutional management (7), industrial engineering (14), liberal arts (20) (including social science and communication arts majors), marketing (29), mathematics (5), materials and logistics management (10), MBA's (13), mechanical engineering (59), merchandise management/ retailing (5), nurses (4), occupational therapists (4), packaging engineering (5), physical therapist (5), and software engineering (5).

New and Emerging Occupations

Several new and emerging occupations were reported by organizations responding to this year's survey. Provided below in alphabetical order with frequencies of response noted after each are those listed most often by employers: (Page 38)

Allied health care professionals (3), aquatic ecologists, biochemists, biomedical technologists, chemical safety engineers, chemists, Chinese bilingual language specialists, clinical nurse specialists, communications systems managers, computer software engineer, computer network engineers, information systems specialists, corrosion engineers, distribution/ operations/ logistics management specialists, environmental and health safety analysts, safety engineer,

environmental engineer, environmental/ industrial hygienist, environmental researcher, financial planner, fund developers, industrial engineers, integrated pest management specialists, international marketing representatives with second and third language skills, nuclear medicine, pattern engineers, technical designers, fabric technicians, performance management analysts, photo/laser research and design specialists, physical therapists, power quality analysts, process engineers, production engineers and managers, project engineers and managers, quality assurance engineer, right-of-way agents, specialized sales/ service representative, security service supervisors, stock brokers, financial analysts, trading specialists, financial operations analysts, technology transfer and deployment analysts, science and technology specialists, toxicologists, and ultrasonographers.

New Hires with No Career-Related Experiences

Of the 8,131 new college graduates hired by 264 surveyed employers last year, 3,029 (37.2%) had no prior career-related work experiences. (Page 11)

New college graduates with career-related work experiences were preferred by employers, especially those with cooperative education assignments, internships, summer employment, and part-time positions.

Campuses Visited Last Year and Anticipated Visits This Year

Employers responding to this year's survey expected additional decreases in the number of campuses visited (-6.2%) for interviewing new college graduates. For the last three years, campus visits have decreased: 27.7% in 1991-92, 4.9% in 1990-91, and 0.7% in 1989-90. (Page 37)

College Graduates Interviewed and Hired

Last year (1991-92), 91,665 new college graduates were interviewed on college campuses by 245 surveyed organizations, and 8,403 were hired (9.1%). (Page 42-44)

Of these interviews, 36,808 were held by 240 surveyed employers interviewing technical college graduates, and 3,372 were hired (9.1%). Technical graduates, for purposes of this research, were identified as new college graduates in engineering, computer science, and natural sciences.

Surveyed employers reported that 42,594 non-technical college graduates were interviewed on college campuses last year (1991-92), and 3,229 were hired (7.5%). Non-technical graduates were identified as new college graduates with academic majors in business and the liberal arts.

Characteristics of Outstanding Interviews

During interviewing situations, it is important that new college graduates display some of the characteristics of an outstanding job prospect, according to surveyed employers. (Page 45)

Most important when interviewing were a smile and good humor; a businesslike and professional attitude; eagerness and enthusiasm; and an excellent appearance (professional dress, neatness).

Continuing the list of very important characteristics for an excellent interview were well-spoken, clear enuciation, and good diction; relaxed and unnerved pose; confident attitude; graceful manner and politeness; ability to build rapport; sincerity and honesty; and good eye contact and attentiveness.

Less important, but still essential, were ease with answering questions and an ability to keep conversation flowing naturally, without pauses or hesitations.

Thank-You Letters After Interviews

Most employers (76.6%) recommended that new college graduates send "thank you" letters after interviewing with recruiters on campus or visiting employers at their location for second interviews. According to employers, this is an important gesture when applying for job opportunities, but it is rarely done. A thank-you letter makes a good impression and helps the interviewer remember the interviewee. For instance, when the hiring decision is close between two people, the thank-you letter could be the deciding factor, according to employers. (Page 46)

Although thank-you letters are not a necessary step in the selection process, they are a nice touch. They show a higher level of effort and interest on the candidate's part. This follow-up shows maturity, dedication, and professionalism. Many employers suggested that thank-you letters could especially help when candidates are not offered a position after their initial interviews. By not sending a letter after an interview, the applicant would miss an opportunity to present themselves and their interests once again.

Offers of Employment Extended and Accepted

According to surveyed employers, offers of employment were extended to 13,759 new college graduates of all degree levels and academic majors last year (1991-92) by 248 organizations. Of these, 5,744 were offered to technical college graduates (41.7%), and 5,389 were offered to non-technical graduates (39.1%). (Pages 47-51)

Employer categories offering the highest percentage of job opportunities (75% to 100%) for liberal arts, social sciences, arts and letters, and business majors were social service, religious, and volunteer organizations (100.0%); hotels, motels, restaurants, and recreational facilities (98.8%); merchandising and retailing (97.6%); accounting firms (84.9%); and food and beverage processing (82.1%).

Although governmental administration and the military did not identify their job openings as either technical or non-technical, from previous experience, most of their openings are available to liberal arts, social sciences, arts and letters, and business majors.

Good opportunities (50% to 74%) for liberal arts and business majors were provided by employers in banking, finance, and insurance (71.1%); textiles, home furnishings, and apparel manufacturers (55.8%); petroleum and allied products (53.4%); and glass, packaging, and allied products (52.4%).

Fewer than 50% of available job offers were extended to liberal arts graduates seeking employment in engineering, research, consulting, and other professional services (41.0%); communications and telecommunications including telephones and newspapers (39.3%); agribusiness (38.2%); automotive and mechanical equipment (36.5%); public utilities including transportation (31.6%); and chemicals, drugs, and allied products (21.5%).

For the remaining employer categories, most job offers were received by new technical college graduates: construction and building contractors (96.1%); metals and metal products (88.4%); lumber, wood products, and furniture manufacturers (88.1%); hospitals and health care services (85.0%); diversified conglomerates (82.7%); and aerospace and components (82.6%).

Average Cost of Recruiting and Hiring

The average cost of recruiting and hiring a new college graduate, according to surveyed employers, was $3,738. This included any related costs, but excluded any expenses for training after hiring. (Page 52)

Employer categories reporting the highest costs for recruiting and hiring were automotive and mechanical equipment ($21,800); glass, packaging, and allied products ($6,628); governmental administration and military including federal, state, and local ($5,376); and electronics, computers, and electrical equipment manufacturers ($5,154).

Work Environment Changes and Influences on Qualifications for New College Graduates

Several significant changes in the work environments of surveyed organizations during the last five years will influence the qualifications new college graduates will need before they are hired. (Page 61)

Increased computerization was most prominent among changes occurring in most occupational categories of surveyed organizations. Therefore, more computer knowledge was considered mandatory for new college graduates hired. Among examples of job categories listed by surveyed organizations were client-server computers, personal computers at all workstations, computerized inventory distribution systems, on-line engineering design drawing, and automated production.

Increased automation and technology have reduced availability of career opportunities for job applicants with high school diplomas, as more positions are filled by college graduates. Robotics in production facilities, expanded product lines, and additional responsibilities attached to many career opportunities have increased the educational level required for adequate job performance.

Prior real-world work experiences and knowledge of the business environment were requirements for many employment opportunities available with surveyed employers. As an example, some employers required direct sales experience for available sales positions.

Providing excellent customer satisfaction was also a necessity, according to surveyed employers. In today's competitive market, foreign vendors are forcing U.S. manufacturers and industrial organizations to produce better quality products, to communicate more effectively with their customers, to create better marketing strategies, and to exhibit more refined interpersonal skills.

Constant change and increased competition were also demanding greater flexibility from more creative managers. According to surveyed employers, an ability to adapt to change was absolutely necessary for new employees. They must be willing to accept a broader range of jobs and work tasks, relocate for promotions, and work overtime when necessary.

A stronger emphasis on teamwork, work groups, self-directed work teams, team building, and coaching vs. supervision was expected by surveyed employers. The work environment in the last five years has shifted toward stronger support for employee involvement, a focus on total quality management, continuous improvement programs, and team-based design production systems, thus placing more importance on social skills.

Reorganization Activities and Results Achieved

Within the past five years, 207 organizations (63.4%) were involved in one or more of the reorganization activities listed. Most frequently occurring of the reorganization activities was downsizing. Of the surveyed employers responding, 63.4% experienced this activity. More than half the respondents also experienced layoffs (57.3%). (Pages 16-18)

Less frequently occurring were acquisitions (36.8%), plant closings (26.0%), mergers (23.0%), division closures (18.4%), partial plant closures (18.4%), divestitures (16.6%), and takeovers (5.4%).

Downsizing, job eliminations, and corporate mergers in surveyed organizations were accomplished by offering early retirement packages, reassigning employees to different positions, transferring some employees to other corporate divisions, and laying off professional personnel when necessary. Consolidation of positions was accomplished after downsizing by automating office functions and introducing new technologies to production facilities.

Involvement with reorganization activities during the last five years has caused some loss or gain in salaried employee positions. Among 240 organizations reporting statistics, 24,454 salaried employee positions were lost, but 40 employers (15.9%) reported minimal gains in salaried positions. (Page 17)

In many organizations (217) responding, reorganization activities influenced their recruitment activities for new colleges graduates. Some of these changes were positive, a few negative, and other organizations reported no changes caused by reorganization activities. Of 9,166 new hires reported by surveyed employers, 235 positions were lost due to reorganization activities.

Anticipated Changes in the College Job Market for 1993-94

Only slight increases were predicted in the job market for new college graduates in 1993-1994. This brighter outlook was reflected in minimal increases expected by surveyed employers in the fourth quarter of 1992 (2.6%), the first quarter of 1993 (3.1%), the second quarter of 1993 (3.4%), the third quarter of 1993 (2.6%), the fourth quarter of 1993 (2.5%), and throughout 1994 (2.9%). Responses varied for different employer categories. (Page 19)

A generally optimistic outlook was reported by most surveyed employers. From 58.9% to 77.7% expected an improved job market for new college graduates. Only 3.3% to 10.3% predicted a decrease in the market for 1993 and 1994.

Changes in Recruitment Practices

Surveyed organizations have initiated several changes in recruitment practices during the last two years. Among the most prominent adjustments were reduced campus visits, more specific selection criteria for hiring new college graduates, and a greater emphasis on hiring experienced applicants. (Pages 28-29)

Decreased recruitment of new college graduates was reported by several employers. These organizations visited fewer schools for on-campus interviewing and attended fewer career fairs. On college and university campuses that remained on employer recruiting schedules, an increased emphasis was placed on campus contacts, presentations to student groups, and visits with student leaders.

Targeted schools or consortiums were more common, especially during lean times. More active involvement from senior managers with campus recruiting was promoted and key contacts were established at schools targeted by employers for their recruitment efforts. Especially with these institutions, an active applicant supply was maintained. Historical data were used to determine the schools to target. New campuses were selected in areas where employers would like to eventually place trainees.

Hiring of more minority and women candidates was pursued more aggressively, especially in areas where few existed (i.e. engineering). Schools with larger minority populations received additional attention from employers, and attendance at more minority job fairs was arranged. Employers reported that they were going farther distances to recruit minority candidates. Their intention was

maximum exposure and involvement with campus minority and women's organizations.

Employers established stronger cooperative education and internship programs. Top candidates were placed early into formalized internship and co-op programs, and employers intended to ultimately rotate these individuals into full-time employment opportunities.

Some employers reported more use of college and university placement offices. They made greater efforts to develop closer relationships with college placement officials. New recruitment brochures and high-tech display boards were used to help with efforts to contact more college graduates, and organizations now posted more job listings with campus career centers.

Employers used advertisements in local newspapers when hiring more new employees. Also reported were an increased reliance on employee referrals, networking, college faculty, and notices in professional journals. Fewer college recruiters were needed, when these sources of new personnel proved successful.

Employers reported more entry level hires with a focus on internal training and subsequent promotions. Some hired new employees for hourly positions and selected their new management personnel from these individuals. More proactive recruitment of internal candidates was predicted. Staff development departments were established to assist current employees and new hires with their people and communication skills.

More specific selection criteria were used by employers when recruiting new college graduates. Employers reported that they were much more selective about the candidates they hired. They used competitive assessment centers for second interviews as a technique to assist with the selection process. Applicants for some organizations were not considered with a GPA of less than 3.0 on a 4.0 system, unless the applicants had relevant full- or part-time work experiences.

Numerous employers hired more experienced people. These employers shifted away from college recruiting and hired individuals with two to five years of experience, because more experienced individuals were available and already trained.

Recruitment Programs for Entry-Level Personnel

Surveyed organizations used many recruitment programs when seeking new college graduates for entry-level positions. Among the 334 employers reporting, some programs were used more extensively than others. (Page 30)

The most frequently used recruitment programs, according to surveyed employers, were activities with college and university placement offices (85.6%), working with public employment agencies and public-funded job training programs--i.e. JTPA, etc. (51.7%), expanded internal recruitment within the organization (52.9%), and establishing employee referral programs (49.3%).

Used less frequently by employers were alternative print and electronic media-- cable TV, direct mail, computer networks, etc. (21.6%) and recruiting from the customer base--point of purchase recruiting (14.6%).

Most Serious Problems for Campus Recruiters

The most serious problems facing personnel representatives when recruiting on college campuses this year were limited numbers of minorities and women candidates, unrealistic expectations from graduating students, and the need for more career-related work experiences from job applicants. (Pages 31-32)

Limited numbers of minorities and women candidates were available, according to surveyed employers. Academic majors with too few graduates to meet demand included engineering, retailing, business, and the physical sciences. Surveyed employers reported difficulty in tapping minority populations and maintaining a diverse workforce.

Unrealistic expectations were expressed by many graduating students who were not satisfied with entry-level positions, geographical locations of jobs, and beginning wages, according to employer reports. College graduates were expecting high salaries handed to them instead of earning responsibility commensurate with salary increases. Students lacked understanding of the efforts necessary for success in the outside world.

Prior work experiences were desired by surveyed employers, but too many recent college graduates had little or no solid work history. Employers cited related work experiences as especially important in a competitive world with many new college graduates for few openings. Employers noted that it was a disadvantage to recruit new graduates with no "real-world" work experience when current workforces were lean. During these times, employers looked instead for experienced people when openings occurred. New graduates were encouraged to get hands-on experiences through internships, part-time jobs, and technical assignments in areas related to their degree plans.

Gaining access to the best students and attracting top notch academic achievers was another problem, especially when this pool of applicants seemed to be shrinking. When recruiting on college campuses, employers lacked the ability to completely pre-screen, which concerned them. It was also difficult to find recruits with enthusiasm, real interests in careers available with employing organizations, and enough initiative to follow-up after interviewing.

Name recognition and image of the organization caused challenges for numerous employers. The stock brokerage industry, financial services organizations, retailing, paper mills, sales occupations, tobacco companies, the military, small towns, and certain geographical locations were cited as examples of especially difficult areas.

Employers reported an abundance of uninformed and poorly prepared graduating students. These individuals had poor job hunting skills, neglected to research companies before interviewing, submitted poorly written and designed resumes, and demonstrated marginal interviewing skills. Employers were disturbed by graduating students' lack of preparation for job hunting and their presentations during interviews.

Placement personnel and career development offices lacked the customer services touch, according to surveyed employers. On certain college campuses, placement personnel were not in touch with the needs of the employers, nor were they providing the services employers desired (i.e. preselection of candidates on interviewing schedules, etc.).

Academic preparation was also lacking, according to employers. A lack of interpersonal skills and ineffective communication abilities, especially oral and written, were most notable. There were also too many students with low grade point averages.

Employers noted a lack of real jobs to offer and too many graduating students. Many employers mentioned limited numbers of available positions. Others operated in rapidly changing environments, so they were not always sure of the numbers of new hires necessary until the actual hiring time.

In many organizations, limited resources for recruitment activities and uncertain budgets were real challenges. As examples, starting salaries in some organizations were not competitive with other sectors of the job market and budgets were too limited to fill vacant positions. Further compounding this problem, employers were short on time to adequately interview and hire recent graduates when positions became available, and they faced tremendous competition from larger organizations that could afford to pay higher starting salaries.

Background Checks

Background checks were "always" or "almost always" conducted by surveyed employers when hiring new college graduates. Most frequently checked were work habits (58.4%), absen

teeism (50.9%), and work attitudes/ethics (58.9%) of job applicants. (Page 53)

Less frequently checked were criminal convictions (38.7%), drug abuse (35.6%), history of excessive alcohol use (23.5%), driving records (19.7%), medical records analysis (17.8%), involvement with excessive litigations (13.6%), credit bureau checks (13.6%), and workers' compensation claims (7.9%).

To check academic records of new hires and to confirm receipt of a degree, transcripts were requested by numerous employers.

Desire to Attend Graduate School And Its Impact on the Hiring Decision

When graduating students indicate a desire to attend graduate school in the near future (within one to three years after graduation), the impact on an employer's hiring decision could be anywhere from positive (54.0%), to neutral (35.6%), or negative (10.2%), depending upon relevance of the advanced degree coursework to the employer's work situation. Also, part-time programs with evening hours only were received more positively. (Page 54)

When applying for employment, graduating students should understand that the prospective employer's first focus is on outstanding job performance. If an employer suspects that the applicant's primary interest is graduate study, rather than top job performance, then the individual's application will not be given very serious consideration. From the employer's perspective, this calls into question the candidate's commitment to a career in the employer's business.

This is especially true if attendance at graduate school will require termination of employment. If attendance at graduate school would be within commuting distance of the employer's work location, then the employer might be supportive. If the student selected graduate school, then employers would urge them to come back and reapply when their graduate studies were finished.

Positive support for graduate study could be expected from employers if coursework for the advanced degree program would apply to their business. The amount of support also depended on the student's plans to attend full- or part-time and the student's intentions once the degree is completed.

High turnover was a concern among surveyed employers. According to these employers, students seldom return after obtaining an advanced degree. In these cases, employers did not recoup training losses experienced during the first two to three years new hires were on the job.

Some companies encouraged all employees to advance their educational pursuits by offering 100% tuition support, so most employees did not leave the company to pursue higher education. Instead, they worked and studied at the same time.

Only one year on the job before quitting to attend graduate school was absolutely a problem for many surveyed employers. According to employing officials, it takes about two to three years for a new hire to understand the best jobs in any organization and perform capably. For this reason, most employers expected two to three years of commitment before offers would be extended. Again, depending upon the position to be filled, and the individual applying for the assignment, employers expected a return on their investment in terms of work performance for training time provided.

Preparation Needed from College Experiences

When recommending preparation needed during college and university experiences for employment within the organizations surveyed, employers suggested that every one of the listed activities and preparations would "almost always" be helpful. Exact preparation would depend upon the position to be filled, of course. (Page 55)

Most important, according to surveyed employers, were career-related work experiences and excellent communication skills. These preparations were "always" or "almost always" recommended by 87.0% and 96.8%, respectively, of the employers responding.

Very important, but receiving lower ratings, were summer and part-time employment (83.3%), internships/ cooperative education assignments (77.7%), computer literacy (77.4%), other work experiences (69.0%), participation in student activities and organizations (61.9%), campus leadership experiences (60.9%), and research/ analytical skills (54.6%).

Other preparations desired by employers were better mathematical skills, improved writing skills, excellent public speaking abilities, interviewing expertise, and an ability to analyze quickly and act decisively.

Deficiencies Found after Hiring and Employer Responses

When new college graduates were hired by surveyed employers, deficiencies were sometimes found in one or several skill or knowledge areas which were critical for effective job performance after six months on the job. In these situations, surveyed employers responded by discussing the deficiencies with the employees and by suggesting appropriate remedial training. (Page 56)

Pursued "always" or "almost always" by 94.0% of the surveyed employers was the option of discussing any deficiencies with employees in performance appraisal interviews. In the employee evaluation procedures of surveyed organizations, this was an early major step toward improvement of the individual's job performance.

Used "always" or "almost always" by 84.2% of the surveyed employers was the option of discussing any deficiencies with employees and then reviewing remedial options, such as additional training needed. Used less frequently (37.3%) was the choice of offering remedial training within the organization to employees free of charge during working hours. The other alternative proposed to surveyed employers was communicating with the employee to either invest in remedial training or be discharged. This option was used "always" or "almost always" by 21.0% of the surveyed employers.

Only a few surveyed employers (19.8%) were offering remedial training to employees with partial reimbursement after working hours at an outside facility. Rather than this option, most employers offered remedial training to employees within the organization free of charge during working hours.

International Placement Opportunities

Of the 1,742,967 employees currently on the payrolls of 321 businesses, industries, and governmental agencies responding to this survey, 305,745 salaried employees (excluding clerical and laborer staff) were in overseas locations. This represented 17.5% of the current employees on the payrolls of surveyed organizations. (Pages 6, 12-14)

Foreign nationals filled 509 positions (4.9%) with surveyed organizations hiring new college graduates for assignments in the United States last year. A total of 10,276 new college graduates were hired by 282 surveyed employers responding to this question. (Page 12)

Of the 7,089 new college graduates hired by 251 surveyed employers last year (1991-92), 148 personnel (2.0%) were foreign nationals hired for positions with these organizations in overseas locations. (Page 13)

Of the 264 organizations reporting statistics on U.S. citizens placed in positions in overseas locations last year, 214 new employees were hired. This figure represented 2.1% of the 9,835 new hires reported by these organizations. (Page 14)

Equal Employment Opportunity /Affirmative Action Programs Minorities and Women

Among 283 employers reporting hires of new college graduates last year (1991-92), 2,236 of 12,773 new hires were minorities (17.4%). Minority candidates were in short supply when recruiting for current or anticipated positions according to 182 surveyed employers (58.1%). (Page 9, 26)

Of 12,763 new college graduates hired by 282 employers responding, 4,726 women were hired (37.0%). Of the 328 employers reporting shortages, 99 organizations (30.1%) experienced shortages of women candidates last year (1991-92) when recruiting new personnel. (Pages 10, 25)

Handicappers were employed by many of the surveyed employers. The term **handicapper** was chosen rather than **disabled** to describe one who competes in spite of a handicap. By definition, a handicap is any encumbrance or disadvantage that makes success more difficult. The idea of competing with a "hand-i-cap" makes the individual's chances of winning equal. To the contrary, the "disabled" is one who is unable to perform work, weakened, crippled, incapacitated, or disqualified. (Pages 7, 59-60)

Employers reported number of salaried employees (excluding clerical and laborer staff) currently on their payrolls who were hearing impaired, blind/visually impaired, mobility impaired, mentally retarded, cerebral palsied, or epileptic.

Employed with 229 organizations responding to this question were 685,983 salaried employees. Of these, 14,434 were handicappers (2.1%).

Competition for top minority and women candidates was reported by surveyed employers as fierce, primarily because not enough of these groups were graduating from engineering schools. Especially needed were more minorities and women in electrical, civil, and chemical engineering and computer science majors. Shortages were continuing in other technical fields as well: physical sciences, mathematics, chemistry, and energy-related occupations.

Additional academic fields of study with reported shortages of minorities and women were accounting majors for public accounting, human resources consulting, retailing, sciences (particularly physical and biological sciences), MBA's with technical undergraduate degrees, production supervision, hotel/restaurant/institutional management, and marketing/sales majors.

The effectiveness of affirmative action/EEO programs in surveyed organization was rated from excellent to poor. Excellent ratings of effectiveness were reported by a select group of respondents. In these cases, affirmative action/EEO programs were active and realistic, but even then, hiring goals fell short of objectives. Another deficiency noted even in the best programs was the retention of African/Americans.

Very effective, very high, and very positive ratings were submitted by a few employers. These programs were effective in employing minorities and women; however, here again, they were ineffective in attracting sufficient minority candidates. These programs were taking aggressive, proactive stands on this issue and making good progress. These employers always considered EEO goals in hiring situations, but were still striving for better numbers.

Good and moderately adequate ratings were received by affirmative action/EEO programs in some surveyed organizations, mostly because they needed more minority candidates to fill hiring goals. Especially weak were hiring goals in technical areas (i.e. engineering, physical sciences, and business).

Drug, Alcohol, and AIDS Testing

According to 324 employers responding, drug testing of new college graduates was required by 59.1% of their organizations. Included in this percentage were employers who "sometimes," "almost always," or "always" screened for drugs. Percentages of employers requiring drug testing in previous years of this study included 55.2% in 1991-92, 59.3% in 1990-91, 47% in 1989-90, 32% in 1988-89, 27% in 1987-88, and 20% in 1986-87. (Page 62)

Testing for alcohol levels among new college graduates was required by 27.1% of surveyed employers this year. This compares to 31.2% in 1991-92, 28.1% in 1990-91, 25% in 1989-90, 14% in 1988-89, and 9% in 1987-88.

AIDS testing of new college graduates was required by only 6.2% of the employers responding to this year's survey. Testing for AIDS in previous years included 2.1% in 1991-92, 5.4% in 1990-91, 4% in 1989-90, 3% in 1988-89 and 2% in 1987-88.

Americans with Disabilities Act (ADA)

When the Americans with Disabilities Act (ADA) became effective on July 26, 1992, policy changes, employee memoranda, or other work environment directives were issued by many of the surveyed organizations in response to this legislation. Of 315 employers responding to this question, 291 reported changes (92.4%) due to requirements of the ADA legislation. (Pages 59-60)

Among changes listed were new employer and employee handbooks, hiring policy changes, manager and supervisor training, employee awareness training, recruiter training, elimination of pre-employment physicals, rennovation of physical facilities, revision of employment application forms, revised interviewing procedures, and reviews of all job descriptions.

Sexual Harassment Policies in Surveyed Organizations

Sexual harassment policies and reporting of incidents were prevalent among 93.0% of the surveyed organizations. Of 316 employers responding, 294 had a strict policy on sexual harassment and reporting of incidents. (Page 58)

Employees of most surveyed employers were aware of sexual harassment policies as a result of company training programs and were required to immediately report any incidents through specific organization channels. Although training was provided to all employees, special in-depth training was given to supervisors on their responsibilities. In most organizations, all reported incidents must be immediately and thoroughly investigated. All employees were trained to understand the illegal aspects of these incidents, and posters were displayed throughout facilities that directed employees to report their concerns through established company channels.

Formal, written policies were distributed to all new employees throughout the organizations indicating that sexual harassment charges would result in suspension or discharge, according to surveyed employers. The most effective policies left no doubts about the organization's response, and rigid enforcement was communicated.

Compensation Plans and Retirement Benefit Packages

Compensation plans and retirement benefit packages were offered to new college graduates hired by most surveyed employers (87.1%). (Pages 40-41)

Most frequently offered were vested benefits, tuition reimbursement for graduate studies or advanced degrees, and defined contribution plans. Of surveyed employers responding, 76.7% "always" or "almost al-

ways" provided vested benefits, 73.1% offered tuition reimbursement for graduate studies or advanced degrees, and 67.5% provided retirement contribution plans.

Sometimes offered were skill based/knowledge based pay and a greater percentage of before-tax pay in benefits. Of respondents, 47.4% "always" or "almost always" included skill based/knowledge based pay, and 42.2% "always" or "almost always" offered new college graduates the option of a greater percentage of before-tax pay in benefits.

Least frequently, or seldom, offered were employee stock ownership plans, replacement of raises with lump sum bonuses, group/team based incentive pay plans, comparable worth pay, profit sharing/gain sharing pay plans, two-tier wage and benefit plans, traditional annuities based on salary and length of service, and individual retirement accounts (IRAs).

Other compensation and benefit options mentioned by employers were commissions based on sales, bonuses, yolk matching programs, employee stock option programs, paid medical and dental benefits, paid vacation days, paid holidays, discounts on merchandise, life insurance, short-term disability, long-term disability, deferred compensation plans (401 K and 457), and thrift savings plans (similar to 401 K plans with matching employer contributions).

How many **new college graduates** (all degree levels and academic majors) **were hired by your organization last year (1991-92)** for salaried positions, and how many does your organization **expect to hire** this year (1992-93) for salaried positions? Responses are listed by MAJOR EMPLOYER CATEGORY.

	Number of New Hires Last Year			Anticipated New Hires This Year		Change From Last Year
	Number of Employ-ers	Total Hired	Average	Total Hired	Average	Percent
Employer Types						
Business, Industry	418	28,854	69	26,839	64	-7.0
Government	37	117,723	3,182	116,629	3,152	-0.9
Overall Totals	455	146,577	322	143,468	315	-2.1

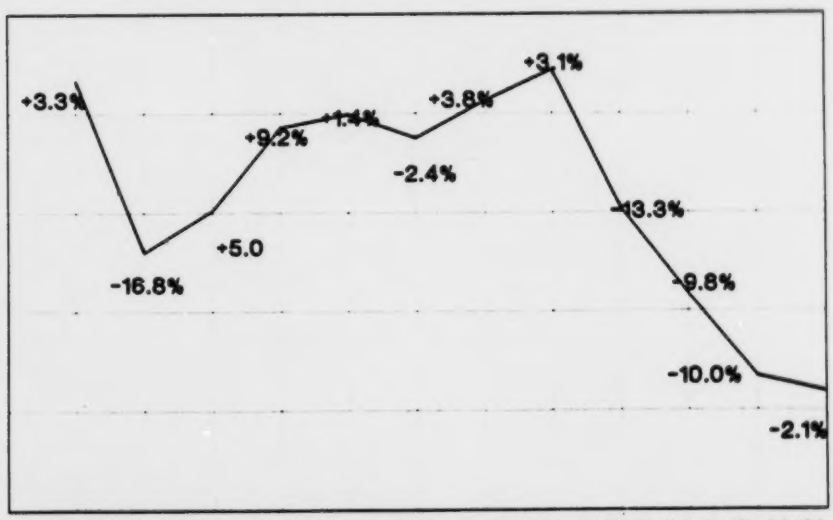
Observations: Responses were received from a total of 504 employers for the Recruiting Trends report of 1992-93. These employers represented businesses, industries, manufacturing organizations, service sector employers, and governmental agencies.

Only employers responding with hiring data for last year and anticipated new hires for this year were included in calculations for this year's job market. According to 455 surveyed employers with complete data, the job market for new college graduates this year is expected to decrease slightly (-2.1%).

For the fourth consecutive year, declining hiring quotas are expected. Last year, a decrease (-10.0%) was expected, and in the two years earlier, decreases were also reported: -9.8% in 1989-90 and -13.3% in 1988-89.

Decreases are expected in all major employer categories: business and industry (-7.0%) and governmental agencies (-0.9%).

HIRING INTENTIONS AMONG EMPLOYERS OF NEW COLLEGE GRADUATES



How many new college graduates were hired last year (1991-92) for professional positions in your organization, and how many new hires are anticipated this year (1992-93)? Responses are listed by EMPLOYER CATEGORY.

	Number of New Hires Last Year			Anticipated New Hires This Year		Change from Last Year
	Number of Employers	Total Hired	Average	Total Hired	Average	Percent
Employer Types						
Accounting	15	3,434	229	3,200	213	-6.8
Aerospace	11	158	14	95	9	-39.9
Agribusiness	11	133	12	143	13	7.5
Automotive	23	1,526	66	1,076	47	-29.5
Banking, Finance	27	4,800	178	4,170	154	-13.1
Chemicals	23	1,816	79	1,622	71	-10.7
Communication	16	1,299	81	1,873	117	44.2
Construction	18	657	37	669	37	1.8
Conglomerates	4	424	106	273	68	-35.6
Electronics	28	3,602	129	3,118	111	-13.4
Engineering, Consulting & Prof. Svcs.	55	5,318	97	5,680	103	6.8
Food Processing	22	522	24	558	25	6.9
Glass/Packaging	11	128	12	150	14	17.2
Government	37	117,723	3,182	116,629	3,152	-0.9
Hospitals	22	884	40	778	35	-12.0
Hotels Hotels	14	441	32	402	29	-8.8
Lumber Products	13	94	7	126	10	34.0
Merchandising	26	1,590	61	1,619	62	1.8
Metals	24	205	9	190	8	-7.3
Petroleum	14	1,272	91	706	50	-44.5
Public Utilities	28	476	17	340	12	-28.6
Service Org.	7	12	2	9	1	-25.0
Textiles	6	63	11	42	7	-33.3
Overall Totals	455	146,577	322	143,468	315	-2.1

Observations: When comparing new college graduates hired last year with anticipated new hires for this year, only a slight decrease overall of 2.1% was revealed for 1992-93.

Because of occasionally small sample sizes in some individual employer groups, caution needs to be taken when interpreting data. Statistics contained in this report best reflect the job market for new college graduates in the organizations responding to this survey.

Employer categories expecting increases in hiring of new college graduates this year (1992-93) include: communications and telecommunications including telephones, newspapers (44.2%); lumber, wood products, and furniture manufacturers (34.0%); glass, packaging, and allied products (17.2%); agribusiness (7.5%); food and beverage processing (6.9%); engineering, research, consulting, and other professional services (6.8%); construction and building contractors (1.8%); and merchandising and retailing (1.8%).

Decreases in hiring projections are anticipated by governmental administration and military including federal, state, and local (-0.9%); accounting firms (-6.8%); metals and metal products (-7.3%); hotels, motels, restaurants, and recreational facilities (-8.8%); chemicals, drugs, and allied products (-10.7%); hospitals and health care services (-12.0%); banking, finance, and insurance (-13.1%); and electronics, computers, and electrical equipment manufacturers (-13.4%).

Decreases in hiring projections of 25% or greater are anticipated by social service, religious, and volunteer organizations(-25.0%); public utilities including transportation (-28.6%); automotive and mechanical equipment (-29.5%); textiles, home furnishings, and apparel manufacturers (-33.3%); diversified conglomerates (-35.6%); aerospace and components (-39.9%); and petroleum and allied products (-44.5%).

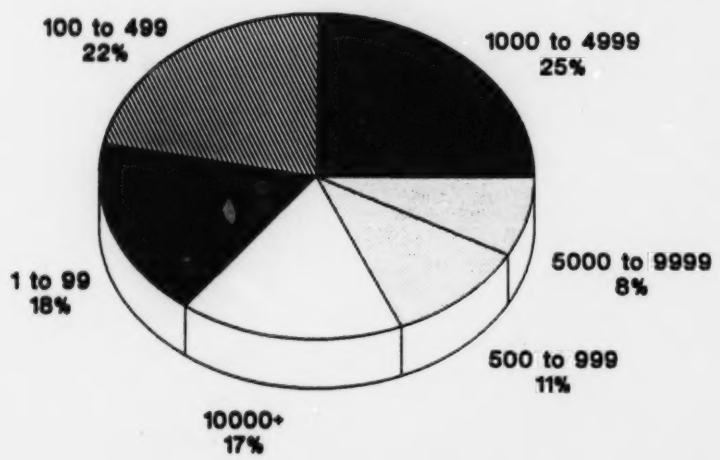
How many **new college graduates** (all degree levels and academic majors) **were hired by your organization last year (1991-92)** for salaried positions, and how many does your organization **expect to hire** this year (1992-93) for salaried positions? Responses are listed by SIZE OF ORGANIZATION.

	Number of New Hires Last Year			Anticipated New Hires This Year		Change from Last Year
	Number of Employers	Total Hired	Average	Total Hired	Average	Percent
Employer Sizes						
1-99	85	192	2	197	2	2.6
100-499	97	796	8	836	9	5.0
500-999	49	753	15	671	14	-10.9
1000-4999	114	4,823	42	4,606	40	-4.5
5000-9999	36	2,307	64	2,380	66	3.2
10,000+	74	137,706	1,861	134,778	1,821	-2.1
Overall Totals	455	146,577	322	143,468	315	-2.1

Observations: Anticipated changes in hiring projections for new college graduates in 1992-93 are expected to vary by size of employer. Increases in hiring projections are expected for employers with 100 to 499 employees (5.0%); employers with 5,000 to 9,999 employees (3.2%); and organizations with 1 to 99 employees (2.6%).

Decreases are anticipated by employers with 10,000 or more employees (-2.1%); organizations with 1,000 to 4,999 employees (-4.5%); and employers with 500 to 999 employees (-10.9%).

Employer Size By Number Of Employees
Percent of Surveyed Employers '92-93



Which **category best describes your organization,** and how many **total salaried employees** (excluding clerical and laborer staff) are currently on the payroll of your organization? The number of responses received for each answer are listed on the first line and percentages of total on the second line. Responses are listed by EMPLOYER CATEGORY.

Size of Organization by
Number of Salaried Employees

Employer
Categories

Frequency Percent	1-99	100-499	500-999	1000-4999	5000-9999	10,000+	Total
Accounting	8 1.59	2 0.40	2 0.40	1 0.20	0 0.00	2 0.40	15 2.98
Aerospace	0 0.00	2 0.40	3 0.60	3 0.60	2 0.40	2 0.40	12 2.38
Agribusiness	3 0.60	4 0.79	1 0.20	1 0.20	1 0.20	1 0.20	11 2.18
Automotive	4 0.79	6 1.19	2 0.40	5 0.99	3 0.60	4 0.79	24 4.76
Banking, Finance	3 0.60	4 0.79	3 0.60	11 2.18	5 0.99	8 1.59	34 6.75
Chemicals	2 0.40	3 0.60	1 0.20	6 1.19	5 0.99	7 1.39	24 4.76
Communication	3 0.60	3 0.60	3 0.60	3 0.60	2 0.40	4 0.79	18 3.57
Construction	7 1.39	4 0.79	0 0.00	6 1.19	2 0.40	2 0.40	21 4.17
Conglomerates	1 0.20	1 0.20	0 0.00	0 0.00	0 0.00	3 0.60	5 0.99
Electronics	4 0.79	5 0.99	4 0.79	7 1.39	4 0.79	7 1.39	31 6.15
Engineering	12 2.38	18 3.57	8 1.59	12 2.38	3 0.60	10 1.98	63 12.50
Food Processing	2 0.40	6 1.19	2 0.40	8 1.59	2 0.40	3 0.60	23 4.56
Total	90 17.86	111 22.02	54 10.71	125 24.80	40 7.94	84 16.67	504 100.00

(Continued)

Continued . . .

Size of Organization by
Number of Salaried Employees

Employer
Categories

Frequency Percent	1-99	100-499	500-999	1000-4999	5000-9999	10,000+	Total
Glass/Packaging	1 0.20	1 0.20	2 0.40	6 1.19	0 0.00	1 0.20	11 2.18
Government	4 0.79	9 1.79	2 0.40	10 1.98	5 0.99	13 2.58	43 8.53
Hospitals	4 0.79	7 1.39	3 0.60	10 1.98	0 0.00	2 0.40	26 5.16
Hotels Motels	6 1.19	6 1.19	1 0.20	2 0.40	0 0.00	1 0.20	16 3.17
Lumber Products	6 1.19	2 0.40	0 0.00	5 0.99	0 0.00	0 0.00	13 2.58
Merchandising	4 0.79	9 1.79	4 0.79	7 1.39	1 0.20	3 0.60	28 5.56
Metals	5 0.99	9 1.79	3 0.60	4 0.79	2 0.40	2 0.40	25 4.96
Petroleum	0 0.00	3 0.60	2 0.40	1 0.20	2 0.40	6 1.19	14 2.78
Public Utilities	3 0.60	4 0.79	7 1.39	15 2.98	1 0.20	3 0.60	33 6.55
Service Org.	7 1.39	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	7 1.39
Textiles	1 0.20	3 0.60	1 0.20	2 0.40	0 0.00	0 0.00	7 1.39
Total	90 17.86	111 22.02	54 10.71	125 24.80	40 7.94	84 16.67	504 100.00

Observations: Responses to the Recruiting Trends survey for 1992-93 were received from 504 employers representing businesses, industries, manufacturing organizations, service sector employers, and governmental agencies. Organizations with 1,000 to 4,999 employees represented 24.8% of the respondents; those with 100 to 499 employees represented 22.0% of the respondents; and organizations with 1 to 99 employees represented 17.9% of the respondents. Organizations with 10,000 or more employees represented 16.7% of the respondents; those with 500 to 999 employees represented 10.7% of the respondents; and organizations with 5,000 to 9,999 employees represented 7.9% of the respondents.

Of the salaried employees (excluding clerical and laborer staff) currently on the payroll of your organization, how many **salaried employees are in overseas locations.** Responses are listed by EMPLOYER CATEGORY.

Number of Employees Overseas	Number of Employers	Total Employees	Number of Employees Overseas	
			Total	Percent
Employer Types				
Accounting	9	2,055	70	3.4%
Aerospace	10	25,195	590	2.3%
Agribusiness	10	8,790	29	0.3%
Automotive	13	44,035	5,219	11.8%
Banking, Finance	17	110,247	3,530	3.2%
Chemicals	11	32,014	4,618	14.4%
Communication	12	214,904	21,495	10.0%
Construction	14	31,890	3,020	9.4%
Conglomerates	3	67,894	27,400	40.3%
Electronics	23	320,346	183,863	57.3%
Engineering, Consulting & Prof. Svcs.	45	79,079	20,784	26.2%
Food Processing	8	7,202	33	0.4%
Glass/Packaging	7	39,267	899	2.2%
Government	24	337,475	25,617	7.5%
Hospitals	18	49,981	4,080	8.1%
Hotels Motels	12	5,314	0	0.0%
Lumber Products	10	7,153	124	1.7%
Merchandising	20	225,097	172	0.0%
Metals	16	12,293	1,140	9.2%
Petroleum	5	30,674	785	2.5%
Public Utilities	24	85,943	12	0.0%
Service Org.	5	158	0	0.0%
Textiles	5	5,961	2,265	37.9%
Overall Totals	321	1,742,967	305,745	17.5%

Observations: Of the 1,742,967 employees currently on the payrolls of 321 business, industry, and governmental agencies responding, 305,745 salaried employees (excluding clerical and laborer staff) were in overseas locations. This represented 17.5% of of the current employees on the payrolls of surveyed organizations.

Employer categories with the largest number of salaried employees in overseas locations were electronics, computers, and electrical equipment manufacturers (57.3%); diversified conglomerates (40.3%); textiles, home furnishings, and apparel manufacturers (37.9%); engineering, research, consulting, and other professional services (26.2%); chemicals, drugs, and allied products (14.4%); automotive and mechanical equipment (11.8%); and communications and telecommunications including telephones, newspapers (10.0%).

Employer categories with fewer than 10% of salaried employees in overseas locations were construction and building contractors (9.4%); metals and metal products (9.2%); hospitals and health care services (8.1%); governmental administration and the military (7.5%); accounting firms (3.4%); banking, finance, and insurance (3.2%); petroleum and allied products (2.5%); aerospace and components (2.3%); glass, packaging, and allied products (2.2%); lumber, wood products, and furniture manufacturers (1.7%); food and beverage processing (0.4%); and agribusiness (0.3%).

No employees were reported overseas by all other employer categories: hotels, motels, restaurants, and recreational facilities; public utilities including transportation; social service, religious, and volunteer organizations; and merchandising and retailing.

Of the salaried employees (excluding clerical and laborer staff) currently on the payroll of your organization, how many are **handicappers*** (i.e. hearing impaired, blind/visually impaired, mobility impaired, mentally retarded, cerebral palsied, or epileptic)? Responses are listed by EMPLOYER CATEGORY.

Number of Employees with Disabilities	Number of Employers	Total Employees	Number of Disabled Employees	
			Total	Percent
Employer Types				
Accounting	9	2,055	41	1.9%
Aerospace	7	23,130	154	0.6%
Agribusiness	7	2,005	48	2.3%
Automotive	9	2,650	41	1.5%
Banking, Finance	12	78,157	216	0.2%
Chemicals	8	22,879	167	0.7%
Communication	6	2,278	22	0.9%
Construction	9	6,449	102	1.5%
Conglomerates	2	15,094	10	0.0%
Electronics	14	85,345	268	0.3%
Engineering, Consulting & Prof. Svcs.	32	19,276	214	1.1%
Food Processing	5	986	18	1.8%
Glass/Packaging	4	4,667	36	0.7%
Government	20	289,615	12,391	4.2%
Hospitals	12	26,363	82	0.3%
Hotels Motels	10	3,514	68	1.9%
Lumber Products	8	6,875	14	0.2%
Merchandising	15	37,597	382	1.0%
Metals	13	9,538	38	0.3%
Petroleum	3	10,674	27	0.2%
Public Utilities	16	36,104	79	0.2%
Service Org.	5	158	6	3.7%
Textiles	3	574	10	1.7%
Overall Totals	229	685,983	14,434	2.1%

Observations: Employed with 229 organizations responding to this question were 685,983 salaried employees. Of these, 14,434 were handicapped persons (2.1%).

The highest percentage of handicapped personnel were reported by governmental administration and military including federal, state, and local levels (4.2%); social service, religious, and volunteer organizations (3.7%); and agribusiness (2.3%).

Employer categories with fewer than 2% handicapped personnel on their salaried payrolls were accounting firms (1.9%); hotels, motels, restaurants, and recreational facilities (1.9%); food and beverage processing (1.8%); textiles, home furnishings, and apparel manufacturers (1.7%); automotive and mechanical equipment (1.5%); and construction and building contractors (1.5%); merchandising and retailing (1.0%); and engineering, research, consulting, and other professional services (1.0%)

Fewer than 1% of salaried employees were handicappers employed with all other employer categories.

*Note: The term **handicapper** was chosen rather than **disabled** to describe one who competes in spite of a handicap. By definition, a handicap is any encumbrance or disadvantage that makes success more difficult. The idea of competing with a "hand-i-cap" makes the individual's chances of winning equal. To the contrary, the "disabled" is one who is unable to perform work, weakened, crippled, incapacitated, or disqualified.

Within the last year (1991-92), how many **salaried employees were laid off** by your organization? Responses are listed by EMPLOYER CATEGORY.

Number of Employees Laid Off	Number of Employers	Total Employees	Layoff of Salaried Employees	
			Total	Percent
Employer Types				
Accounting	8	1,615	7	0.4%
Aerospace	9	24,230	2,449	10.1%
Agribusiness	9	8,290	234	2.8%
Automotive	13	41,135	307	0.7%
Banking, Finance	19	103,757	3,737	3.6%
Chemicals	12	37,014	159	0.4%
Communication	10	63,852	229	0.3%
Construction	13	30,090	929	3.0%
Conglomerates	3	67,894	103	0.1%
Electronics	23	233,486	3,740	1.6%
Engineering, Consulting & Prof. Svcs.	45	80,179	2,441	3.0%
Food Processing	10	7,842	92	1.1%
Glass/Packaging	6	8,860	392	4.4%
Government	24	298,475	559	0.1%
Hospitals	15	38,261	58	0.1%
Hotels Motels	13	5,714	41	0.7%
Lumber Products	10	7,153	112	1.5%
Merchandising	20	49,647	693	1.3%
Metals	17	43,270	132	0.3%
Petroleum	4	25,674	205	0.7%
Public Utilities	24	83,899	904	1.0%
Service Org.	5	158	13	8.2%
Textiles	5	2,496	163	6.5%
Overall Totals	317	1,262,991	17,699	1.4%

Observations: Among 317 organizations responding to this question, 17,699 salaried employees (1.4%) were laid off last year (1991-92). Employed by these employers were 1,262,991 salaried personnel.

Layoffs were reported by every employer category.

The highest percentages of salaried employees were laid off by aerospace and components (10.1%); social service, religious, and volunteer organizations (8.2%); textiles, home furnishings, and apparel manufacturers (6.5%); glass, packaging, and allied products (4.4%); banking, finance, and insurance (3.6%); construction and building contractors (3.0%); engineering, research, consulting, and other professional services (3.0%); agribusiness (2.8%); merchandising and retailing (1.3%); electronics, computers, and electrical equipment manufacturers (1.6%); lumber, wood products, and furniture manufacturers (1.5%); food and beverage processing (1.1%); public utilities including transportation (1.0%); automotive and mechanical equipment (0.7%); petroleum and allied products (0.7%); hotels, motels, restaurants, and recreational facilities (0.7%); chemicals, drugs, and allied products (0.4%); accounting firms (0.4%); metals and metal products (0.3%); communications and telecommunications including telephones, newspapers (0.3%); hospitals and health care services (0.1%); diversified conglomerates (0.1%); and governmental administration and military including federal, state, and local levels (0.1%).

Only included in this analysis were organizations reporting data on total salaried employees and salaried employees laid off.

Among the new college graduates hired by your organization last year (1991-92), how many were **minorities** (Black/ African-American, Hispanic, Spanish/ American, Asian/ Pacific Islanders, or American Indians)? Responses are listed by EMPLOYER CATEGORY.

New Graduates Hired Last Year	Number of Employers	No. of New Graduates Hired	Number of Minorities Hired	
			Total Hired	Percent
Employer Types				
Accounting	9	209	27	12.9%
Aerospace	8	83	20	24.0%
Agribusiness	8	76	6	7.8%
Automotive	10	723	30	4.1%
Banking, Finance	16	831	168	20.2%
Chemicals	13	622	105	16.8%
Communication	11	1,116	365	32.7%
Construction	11	222	71	31.9%
Conglomerates	2	371	65	17.5%
Electronics	21	2,039	189	9.2%
Engineering, Consulting & Prof. Svcs.	35	1,901	342	17.9%
Food Processing	10	90	11	12.2%
Glass/Packaging	7	112	22	19.6%
Government	20	1,601	296	18.4%
Hospitals	15	561	84	14.9%
Hotels Motels	13	86	8	9.3%
Lumber Products	7	52	8	15.3%
Merchandising	20	1,449	300	20.7%
Metals	14	148	17	11.4%
Petroleum	3	38	11	28.9%
Public Utilities	20	365	72	19.7%
Service Org.	5	9	5	55.5%
Textiles	5	69	14	20.2%
Overall Totals	283	12,773	2,236	17.5%

Observations: Among 283 employers reporting hires of minority graduates last year (1991-92), 2,236 of 12,773 new hires were minorities (17.5%).

Employer categories with the greatest percentage of minority new hires were communications and telecommunications including telephones, newspapers (32.7%); construction and building contractors (31.9%); petroleum and allied products (28.9%); aerospace and components (24.0%); merchandising and retailing (20.7%); banking, finance, and insurance (20.2%); textiles, home furnishings, and apparel manufacturers (20.2%); public utilities including transportation (19.7%); glass, packaging, and allied products (19.6%); governmental administration and military including federal, state, and local levels (18.4%); engineering, research, consulting, and other professional services (17.9%); diversified conglomerates (17.5%); chemicals, drugs, and allied products (16.8%); lumber, wood products, and furniture manufacturers (15.3%); hospitals and health care services (14.9%); accounting firms (12.9%); food and beverage processing (12.2%); metals and metal products (11.4%); hotels, motels, restaurants, and recreational facilities (9.3%); electronics, computers, and electrical equipment manufacturers (9.2%); agribusiness (7.8%); and automotive and mechanical equipment (4.1%).

Only organizations reporting data on both total new hires and number of minorities hired were included in this analysis.

Among the new college graduates hired by your organization last year (1991-92), how many were women? Responses are listed by EMPLOYER CATEGORY.

New Graduates Hired Last Year	Number of Employers	No. of New Graduates Hired	Number of Women Hired	
			Total Hired	Percent
Employer Types				
Accounting	9	209	113	54.0%
Aerospace	8	83	20	24.0%
Agribusiness	8	76	30	39.4%
Automotive	10	723	32	4.4%
Banking, Finance	16	831	447	53.7%
Chemicals	13	622	145	23.3%
Communication	11	1,116	694	62.1%
Construction	11	222	25	11.2%
Conglomerates	2	371	120	32.3%
Electronics	21	2,039	433	21.2%
Engineering, Consulting & Prof. Svcs.	35	1,901	653	34.3%
Food Processing	10	90	28	31.1%
Glass/Packaging	7	112	22	19.6%
Government	20	1,601	559	34.9%
Hospitals	14	549	385	70.1%
Hotels Motels	13	86	42	48.8%
Lumber Products	7	52	17	32.6%
Merchandising	20	1,449	818	56.4%
Metals	14	148	19	12.8%
Petroleum	3	38	14	36.8%
Public Utilities	19	365	74	20.2%
Service Org.	6	11	5	45.4%
Textiles	5	69	31	44.9%
Overall Totals	282	12,763	4,726	37.0%

Observations: Among 12,763 new college hires reported by 282 employers responding to this question, 4,726 women were hired (37.0%).

The employer categories with the highest percentage of women among their new college hires were hospitals and health care services (70.1%); communications and telecommunications including telephones, newspapers (62.1%); merchandising and retailing (56.4%); accounting firms (54.0%); and banking, finance, and insurance (53.7%).

Employer categories hiring fewer than 50% women were hotels, motels, restaurants, and recreational facilities (48.8%); social service, religious, and volunteer organizations (45.4%); textiles, home furnishings, and apparel manufacturers (44.9%); agribusiness (39.4%); petroleum and allied products (36.8%); governmental administration and military including federal, state, and local levels (34.9%); engineering, research, consulting, and other professional services (34.3%); lumber, wood products, and furniture manufacturers (32.6%); diversified conglomerates (32.3%); food and beverage processing (31.1%); aerospace and components (24.0%); chemicals, drugs, and allied products (23.3%); electronics, computers, and electrical equipment manufacturers (21.2%); and public utilities including transportation (20.2%);

Hiring of fewer than 20% women was reported by glass, packaging, and allied products (19.6%); metals and metal products (12.8%); construction and building contractors (11.2%); and automotive and mechanical equipment (4.4%).

Organizations reporting data on both total new hires and number of women hired were the only ones included in this analysis.

Among new college graduates hired by your organization last year (1991-92), how many had no prior career-related work experiences? Responses are listed by EMPLOYER CATEGORY.

New Graduates Hired Last Year	Number of Employers	No. of New Graduates Hired	New Hires without Experience	
			Total Hired	Percent
Employer Types				
Accounting	9	209	166	79.4%
Aerospace	6	49	32	65.3%
Agribusiness	8	76	27	35.5%
Automotive	10	660	34	5.1%
Banking, Finance	17	866	606	69.9%
Chemicals	10	301	99	32.8%
Communication	9	84	15	17.8%
Construction	10	222	147	66.2%
Conglomerates	2	371	30	8.0%
Electronics	19	1,852	452	24.4%
Engineering, Consulting & Prof. Svcs.	35	470	247	52.5%
Food Processing	10	90	45	50.0%
Glass/Packaging	6	92	58	63.0%
Government	18	363	193	53.1%
Hospitals	12	493	109	22.1%
Hotels Motels	13	86	4	4.6%
Lumber Products	7	52	32	61.5%
Merchandising	18	1,317	548	41.6%
Metals	13	138	80	57.9%
Petroleum	1	8	6	75.0%
Public Utilities	19	250	54	21.6%
Service Org.	6	11	5	45.4%
Textiles	6	71	40	56.3%
Overall Totals	264	8,131	3,029	37.2%

Observations: Of the 8,131 new college graduates hired by 264 surveyed employers last year, 3,029 new hires (37.2%) had no prior career-related work experiences.

Only organizations reporting data on both total new hires and new hires without career-related work experiences were included in this analysis.

The highest percentages of new college hires without career-related work experiences were reported by the following employer categories: accounting firms (79.4%); petroleum and allied products (75.0%); banking, finance, and insurance (69.9%); construction and building contractors (66.2%); aerospace and components (65.3%); glass, packaging, and allied products (63.0%); lumber, wood products, and furniture manufacturers (61.5%); metals and metal products (57.9%); textiles, home furnishings, and apparel manufacturers (56.3%); governmental administration and military including federal, state, and local levels (53.1%); engineering, research, consulting, and other professional services (52.5%); and food and beverage processing (50.0%).

Reporting fewer than 50% of new hires without career-related work experiences were social service, religious, and volunteer organizations (45.4%); merchandising and retailing (41.6%); agribusiness (35.5%); chemicals, drugs, and allied products (32.8%); electronics, computers, and electrical equipment manufacturers (24.4%); hospitals and health care services (22.1%); public utilities including transportation (21.6%); communications and telecommunications including telephones, newspapers (17.8%); diversified conglomerates (8.0%); automotive and mechanical equipment (5.1%); and hotels, motels, restaurants, and recreational facilities (4.6%).

New college graduates with career-related work experiences were preferred by employers: cooperative education assignments, internships, summer employment, part-time positions, etc.

BEST COPY AVAILABLE

How many **foreign nationals** were hired last year (1991-92) for positions with your organization **in the United States?** Responses are listed by EMPLOYER CATEGORY.

New Graduates Hired Last Year	Number of Employers	No. of New Graduates Hired	Foreign Nationals Hired in U.S.	
			Total Hired	Percent
Employer Types				
Accounting	9	209	0	0.0%
Aerospace	9	83	0	0.0%
Agribusiness	8	76	5	6.5%
Automotive	9	600	8	1.3%
Banking, Finance	16	802	10	1.2%
Chemicals	13	623	9	1.4%
Communication	9	34	0	0.0%
Construction	11	27	1	3.7%
Conglomerates	1	1	0	0.0%
Electronics	21	1,862	358	19.2%
Engineering, Consulting & Prof. Svcs.	40	2,131	32	1.5%
Food Processing	7	78	7	8.9%
Glass/Packaging	5	64	2	3.1%
Government	20	1,396	1	0.0%
Hospitals	14	646	25	3.8%
Hotels Motels	13	86	7	8.1%
Lumber Products	7	52	2	3.8%
Merchandising	19	825	28	3.3%
Metals	17	194	4	2.0%
Petroleum	2	35	2	5.7%
Public Utilities	24	383	7	1.8%
Service Org.	5	9	0	0.0%
Textiles	3	60	1	1.6%
Overall Totals	282	10,276	509	4.9%

Observations: Of the 10,276 new college graduates hired by 282 surveyed employers last year, 509 were foreign nationals (4.9%) filling positions with these organization in the United States.

Only organizations reporting data on both total new graduates and foreign nationals hired in the United States last year were included in this analysis.

Employer categories with the highest percentage of foreign nationals hired for positions in the United States were electronics, computers, and electrical equipment manufacturers (19.2%); chemicals, drugs, and allied products (10.4%); food and beverage processing (8.9%); hotels, motels, restaurants, and recreational facilities (8.1%); agribusiness (6.5%); petroleum and allied products (5.7%); lumber, wood products, and furniture manufacturers (3.9%); hospitals and health care services (3.8%); construction and building contractors (3.7%); merchandising and retailing (3.3%); and glass, packaging, and allied products (3.1%).

Approximately 2% or fewer foreign nationals were hired by metals and metal products (2.0%); public utilities including transportation (1.8%); textiles, home furnishings, and apparel manufacturers (1.6%); engineering, research, consulting, and other professional services (1.5%); automotive and mechanical equipment (1.3%); and banking, finance, and insurance (1.2%).

No foreign national hires were reported by governmental administration and military including federal, state, and local; communications and telecommunications including telephones, newspapers; aerospace and components; diversified conglomerates; social service, religious, and volunteer organizations; and accounting firms.

How many foreign nationals were hired last year (1991-92) for positions with your organization in overseas locations? Responses are listed by EMPLOYER CATEGORY.

New Graduates Hired Last Year	Number of Employers	No. of New Graduates Hired	Foreign Nationals Hired Overseas	
			Total Hired	Percent
Employer Types				
Accounting	9	209	0	0.0%
Aerospace	9	83	10	12.0%
Agribusiness	9	76	3	3.9%
Automotive	6	21	2	9.5%
Banking, Finance	14	711	56	7.8%
Chemicals	11	312	10	3.2%
Communication	9	34	0	0.0%
Construction	12	210	20	9.5%
Conglomerates	1	1	0	0.0%
Electronics	13	1,185	26	2.1%
Engineering, Consulting & Prof. Svcs.	35	425	7	1.6%
Food Processing	4	54	3	5.5%
Glass/Packaging	4	59	0	0.0%
Government	21	1,564	0	0.0%
Hospitals	14	628	0	0.0%
Hotels Motels	12	81	0	0.0%
Lumber Products	8	52	1	1.9%
Merchandising	19	825	3	0.3%
Metals	12	114	3	2.6%
Petroleum	1	27	0	0.0%
Public Utilities	19	348	3	0.8%
Service Org.	5	9	0	0.0%
Textiles	4	61	1	1.6%
Overall Totals	251	7,089	148	2.0%

Observations: Of the 7,089 new college graduates hired by 251 surveyed employers last year (1991-92), 148 personnel (2.0%) were foreign nationals hired for positions with these organizations in overseas locations.

Employers reporting data on both total new graduates hired and foreign nationals hired for positions in overseas locations were the only ones included in this analysis.

Employer categories hiring the greatest percentage of foreign nationals for positions in overseas locations were aerospace and components (12.0%); construction and building contractors (9.5%); automotive and mechanical equipment (9.5%); banking, finance, and insurance (7.8%); food and beverage processing (5.5%); agribusiness (3.9%); chemicals, drugs, and allied products (3.2%); metals and metal products (2.6%); electronics, computers, and electrical equipment manufacturers (2.1%); lumber, wood products, and furniture manufacturers (1.9%); engineering, research, consulting, and other professional services (1.6%); textiles, home furnishings, and apparel manufacturers (1.6%); public utilities including transportation (0.8%); and merchandising and retailing (0.3%).

No foreign nationals were hired for positions in overseas locations by all other employer categories.

How many **U.S. citizens** were hired by your organization last year (1991-92) for positions in overseas locations? Responses are listed by EMPLOYER CATEGORY.

New Graduates Hired Last Year	Number of Employers	No. of New Graduates Hired	Number of U.S. Citizens Hired Overseas	
			Total Hired	Percent
Employer Types				
Accounting	9	209	0	0.0%
Aerospace	10	83	10	12.0%
Agribusiness	9	76	2	2.6%
Automotive	9	713	2	0.2%
Banking, Finance	14	711	2	0.2%
Chemicals	11	437	0	0.0%
Communication	10	47	0	0.0%
Construction	12	210	0	0.0%
Conglomerates	1	1	0	0.0%
Electronics	16	1,304	12	0.9%
Engineering, Consulting & Prof. Svcs.	39	2,121	24	1.1%
Food Processing	3	52	0	0.0%
Glass/Packaging	4	59	0	0.0%
Government	19	1,524	63	4.1%
Hospitals	16	651	1	0.1%
Hotels Motels	12	81	0	0.0%
Lumber Products	6	51	0	0.0%
Merchandising	20	855	1	0.1%
Metals	14	167	91	54.4%
Petroleum	3	195	2	1.0%
Public Utilities	18	218	4	1.8%
Service Org.	5	9	0	0.0%
Textiles	4	61	0	0.0%
Overall Totals	264	9,835	214	2.1%

Observations: Hired by 264 organizations reporting statistics on U.S. citizens placed in positions in overseas locations last year were 214 new employees. This figure represented 2.1% of the 9,835 new college hires reported by these organizations.

Only employers reporting data on both total new graduates hired and U.S. citizens placed in positions in overseas locations were included in this analysis.

The highest percentage of new hires reported with U.S. citizenships and employed in overseas locations were in metals and metal products (54.4%); aerospace and components (12.0%); governmental administration and military including federal, state, and local levels (4.1%); agribusiness (2.6%); public utilities including transportation (1.8%); engineering, research, consulting, and other professional services (1.1%); petroleum and allied products (1.0%); electronics, computers, and electrical equipment manufacturers (0.9%); banking, finance, and insurance (0.2%); automotive and mechanical equipment (0.2%); merchandising and retailing (0.1%); and hospitals and health care services (0.1%).

No other employer categories reported new hires who were U.S. citizens and employed in overseas locations.

Does your organization have **an international placement program** for new college graduates? Responses are listed by EMPLOYER CATEGORY.

	International Placement Program			
	Yes		No	
Employer Types	Number of Employers	Percent	Number of Employers	Percent
Accounting	.	.	8	100.0%
Aerospace	.	.	10	100.0%
Agribusiness	.	.	10	100.0%
Automotive	1	7.6%	12	92.3%
Banking, Finance	.	.	18	100.0%
Chemicals	1	7.6%	12	92.3%
Communication	.	.	12	100.0%
Construction	.	.	14	100.0%
Conglomerates	1	50.0%	1	50.0%
Electronics	2	8.0%	23	92.0%
Engineering, Consulting & Prof. Svcs.	4	9.0%	40	90.9%
Food Processing	.	.	9	100.0%
Glass/Packaging	.	.	9	100.0%
Government	2	8.0%	23	92.0%
Hospitals	.	.	19	100.0%
Hotels Hotels	.	.	13	100.0%
Lumber Products	.	.	9	100.0%
Merchandising	.	.	22	100.0%
Metals	.	.	17	100.0%
Petroleum	.	.	3	100.0%
Public Utilities	.	.	24	100.0%
Service Org.	.	.	5	100.0%
Textiles	.	.	6	100.0%
Overall Totals	11	3.3%	319	96.6%

Observations: International placement programs were offered for new college graduates by very few surveyed employers. Of 330 employers responding, 11 organizations (3.3%) provided international placement programs. When programs were provided by employers in stateside locations, these programs mainly consisted of referrals of foreign nationals to contacts in their country of origin.

For overseas assignments, language proficiencies, other than English, were usually required. These programs were frequently conducted through corporate headquarters in overseas cities (i.e. Paris, France; London, England; etc.).

The employer categories offering international placement programs were automotive and mechanical equipment; chemicals, drugs, and allied products; diversified conglomerates; electronics, computers, and electrical equipment manufacturers; engineering, research, consulting, and other professional services; and governmental administration and military including federal, state, and local.

Within the past five years, has your organization been involved in any of the following **"reorganization" activities?** Responses are listed by EMPLOYER CATEGORY.

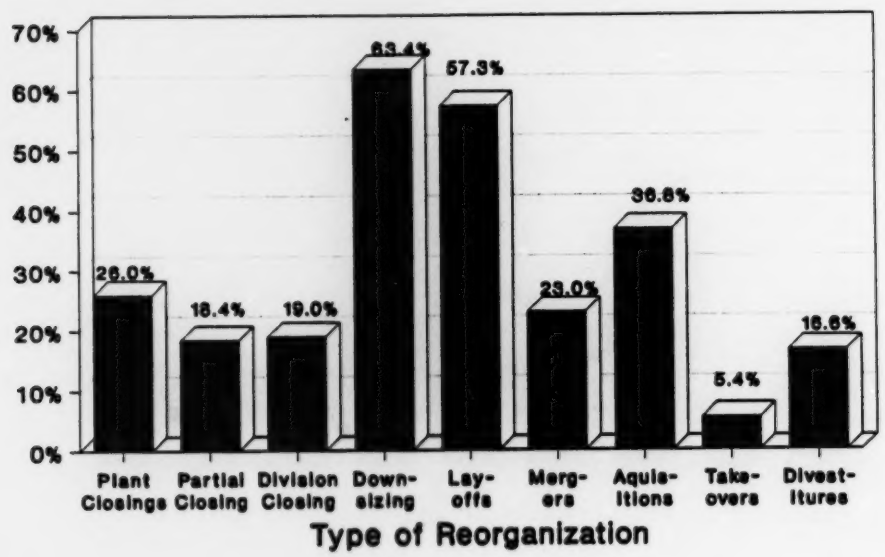
	Any Reorganization Activities				Total Response	
	Yes		No			
Reorganization Activities	N	PCTN	N	PCTN	N	PCTN
Plant Closings	78	26.0%	222	74.0%	300	100.0%
Partial Plant Closures	53	18.4%	235	81.5%	288	100.0%
Division Closures	55	19.0%	234	80.9%	289	100.0%
Downsizing	207	63.4%	119	36.5%	326	100.0%
Layoffs	179	57.3%	133	42.6%	312	100.0%
Mergers	67	23.0%	224	76.9%	291	100.0%
Acquisitions	109	36.8%	187	63.1%	296	100.0%
Takeovers	15	5.4%	258	94.5%	273	100.0%
Divestitures	47	16.6%	235	83.3%	282	100.0%

Observations: Within the past five years, 207 organizations (63.4%) were involved in one of the reorganization activities listed.

Most frequently occurring of the reorganization activities was downsizing. Of the surveyed employers responding, 63.4% experienced this activity. Also occurring for more than half of the respondents were layoffs (57.3%).

Less frequently occurring were acquisitions (36.8%), plant closings (26.0%), mergers (23.0%), division closures (18.4%), partial plant closures (18.4%), divestitures (16.6%), and takeovers (5.4%).

REORGANIZATION ACTIVITIES BY TYPE
Percentage of Employers involved



If your organization has been involved in **"reorganization" activities** during the last five years, how many salaried employee positions were lost or gained?

	Number of Employers	Total Employees	Gain/Loss of Positions		
			Total Positions	Percent of Total	Average Gain/Loss
Employer Types					
Accounting	5	50	-5	-10.0%	-1
Aerospace	8	23,730	-1,735	-7.3%	-216
Agribusiness	8	8,230	-107	-1.3%	-13
Automotive	10	38,397	-1,137	-2.9%	-113
Banking, Finance	10	62,097	-2,038	-3.2%	-203
Chemicals	12	37,014	-2,303	-6.2%	-191
Communication	9	20,053	-1,054	-5.2%	-117
Construction	10	24,060	-969	-4.0%	-96
Conglomerates	2	15,094	-10	-0.0%	-5
Electronics	19	268,489	-6,447	-2.4%	-339
Engineering, Consulting & Prof. Svcs.	35	43,611	-917	-2.1%	-26
Food Processing	4	2,110	190	9.0%	47
Glass/Packaging	5	10,757	197	1.8%	39
Government	15	89,533	-704	-0.7%	-46
Hospitals	13	34,241	-560	-1.6%	-43
Hotels Motels	10	5,412	-291	-5.3%	-29
Lumber Products	6	6,996	-372	-5.3%	-62
Merchandising	18	48,137	-1,942	-4.0%	-107
Metals	13	41,200	-157	-0.3%	-12
Petroleum	2	10,450	-999	-9.5%	-499
Public Utilities	18	75,564	-3,046	-4.0%	-169
Service Org.	5	158	-8	-5.0%	-1
Textiles	3	574	-40	-6.9%	-13
Overall Totals	240	865,957	-24,454	-2.8%	-101

Observations: Among 240 organizations reporting involvement with reorganization activities during the last five years, 24,454 salaried employee positions were lost, but 40 employers (15.9%) reported minimal gains in salaried employee positions.

Reporting gains in salaried positions caused by reorganization activities were food and beverage processing (9.0%); and glass, packaging, and allied products (1.8%).

The employer categories reporting the greatest losses of salaried positions were accounting firms (-10.0%); petroleum and allied products (-9.5%); aerospace and components (-7.3%); textiles, home furnishings, and apparel manufacturers (-6.9%); chemicals, drugs, and allied products (-6.2%); hotels, motels, restaurants, and recreational facilities (-5.3%); lumber, wood products, and furniture manufacturers (-5.3%); communications and telecommunications including telephones, newspapers (-5.2%); and social service, religious, and volunteer organizations (-5.0%).

Losses of less than 4% were reported by construction and building contractors (-4.0%); public utilities including transportation (-4.0%); merchandising and retailing (-4.0%); banking, finance, and insurance (-3.2%); automotive and mechanical equipment (-2.9%); electronics, computers, and electrical equipment manufacturers (-2.4%); engineering, research, consulting, and other professional services (-2.1%); hospitals and health care services (-1.6%); agribusiness (-1.3%); governmental administration and military including federal, state, and local levels (-0.7%); and metals and metal products (-0.3%).

Downsizing, job eliminations, and corporate mergers in surveyed employers were accomplished by offering early retirement packages, reassigning employees to different positions, transferring some employees to other corporate divisions, and laying off professional personnel when necessary.

Did any **changes in recruitment of new college graduates** result from these "reorganization" activities? Responses are listed by EMPLOYER CATEGORY.

	Number of Employers	Total Hired	Gain/Loss in Recruiting Positions		
			Total Positions	Percent of Hired	Average Gain/Loss
Employer Types					
Accounting	6	36	-5	-13.8%	-0
Aerospace	8	45	-192	-426.6%	-24
Agribusiness	8	76	-1	-1.3%	-0
Automotive	11	783	396	50.5%	33
Banking, Finance	11	565	-50	-8.8%	-4
Chemicals	8	268	-30	-11.1%	-3
Communication	5	69	0	0.0%	0
Construction	8	218	-10	-4.5%	-1
Conglomerates	1	1	0	0.0%	0
Electronics	20	3,486	-305	-8.7%	-15
Engineering, Consulting & Prof. Svcs.	31	491	315	64.1%	9
Food Processing	5	14	0	0.0%	0
Glass/Packaging	6	74	-15	-20.2%	-2
Government	14	1,330	34	2.5%	2
Hospitals	12	614	-200	-32.5%	-15
Hotels Motels	8	50	-8	-16.0%	-1
Lumber Products	6	39	0	0.0%	0
Merchandising	15	708	-135	-19.0%	-9
Metals	11	101	0	0.0%	0
Petroleum	1	27	0	0.0%	0
Public Utilities	14	159	-29	-18.2%	-2
Service Org.	5	9	0	0.0%	0
Textiles	3	3	0	0.0%	0
Overall Totals	217	9,166	-235	-2.5%	-1

Observations: In many organizations (217) responding to this year's survey, "reorganization" activities influenced their recruitment activities for new colleges graduates. Some of these changes were positive, a few negative, and other organizations reported no changes caused by reorganization activities.

Employer categories reporting positive influences on their hiring projections were engineering, research, consulting, and other professional services (64.1%); automotive and mechanical equipment (50.5%); and governmental administration and military including federal, state, and local levels (2.5%).

Reporting neither positive nor negative influences on their recruitment activities were communications and telecommunications including telephones, newspapers; petroleum and allied products; food and beverage processing; textiles, home furnishings, and apparel manufacturers; metals and metal products; diversified conglomerates; social service, religious, and volunteer organizations; and lumber, wood products, and furniture manufacturers.

Negative impact was reported by agribusiness (-1.3%); construction and building contractors (-4.5%); electronics, computers, and electrical equipment manufacturers (-8.7%); banking, finance, and insurance (-8.8%); chemicals, drugs, and allied products (-11.1%); accounting firms (-13.8%); hotels, motels, restaurants, and recreational facilities (-16.0%); public utilities including transportation (-18.2%); merchandising and retailing (-19.0%); glass, packaging, and allied products (-20.2%); hospitals and health care services (-32.5%); aerospace and components (-426.6%).

If you were **predicting change in the job market demand** for new college graduates this year (1992-93), compared to a year ago (1991-92), when would you expect this change to occur? Responses are listed by EMPLOYER CATEGORY.

	Fourth Quarter of 1992		First Quarter of 1993		Second Quarter of 1993		Third Quarter of 1993		Fourth Quarter of 1993		1994	
	Number of Employers	Average	Number of Employers	Average	Number of Employers	Average	Number of Employers	Average	Number of Employers	Average	Number of Employers	Average
Employer Types												
Accounting	7	1.1%	7	1.8%	9	2.4%	7	2.1%	7	1.2%	7	2.8%
Aerospace	8	4.7%	7	5.4%	8	5.2%	8	4.5%	8	3.8%	8	5.6%
Agribusiness	9	2.3%	9	2.2%	9	4.0%	9	2.4%	9	1.3%	9	2.8%
Automotive	9	0.2%	9	0.8%	10	2.4%	9	3.0%	10	3.1%	9	2.0%
Banking, Finance	15	1.7%	16	2.3%	15	2.8%	15	1.4%	15	2.1%	13	3.3%
Chemicals	8	5.3%	7	4.2%	7	6.0%	7	2.0%	6	1.0%	7	2.7%
Communication	8	2.0%	7	1.5%	8	2.3%	7	3.1%	9	1.5%	7	2.8%
Construction	10	1.9%	11	3.3%	11	3.0%	11	3.0%	11	2.2%	11	2.5%
Conglomerates	2	5.5%	2	5.5%	2	2.0%	2	3.0%	2	2.5%	2	1.5%
Electronics	21	2.5%	21	3.7%	21	4.3%	19	2.8%	18	2.8%	19	2.4%
Engineering, Consulting & Prof. Svcs.	30	2.6%	30	3.6%	32	3.8%	30	3.5%	30	3.3%	30	3.0%
Food Processing	4	2.5%	5	4.2%	4	3.5%	4	2.0%	4	2.0%	4	3.7%
Glass/Packaging	5	1.6%	6	2.1%	5	2.6%	5	2.4%	5	0.8%	5	3.0%
Government	14	3.9%	15	4.4%	15	3.6%	14	3.5%	13	3.7%	14	4.2%
Hospitals	12	2.5%	11	2.1%	13	2.0%	11	1.0%	12	2.2%	11	1.0%
Hotels Motels	8	0.2%	9	1.5%	9	2.5%	8	0.8%	8	2.8%	8	1.0%
Lumber Products	8	2.0%	9	2.1%	10	2.1%	9	2.2%	9	2.1%	9	2.0%
Merchandising	15	4.4%	16	3.3%	14	2.5%	16	2.3%	15	2.4%	14	2.8%
Metals	17	1.8%	16	3.0%	17	4.3%	17	2.7%	16	2.2%	15	2.8%
Petroleum	2	0.0%	2	0.0%	2	0.0%	2	0.0%	2	4.0%	2	5.0%
Public Utilities	19	3.6%	19	3.4%	18	3.6%	17	2.6%	17	2.8%	17	3.0%
Service Org.	3	0.0%	3	2.0%	3	3.6%	3	2.0%	4	1.5%	3	3.0%
Textiles	3	6.0%	3	6.0%	2	9.0%	2	6.0%	2	6.0%	2	9.0%
Overall Totals	237	2.6%	240	3.1%	244	3.4%	232	2.6%	232	2.5%	226	2.9%

Observations: Only a slight increase is predicted in the job market for new college graduates in 1993-1994. This brighter outlook is reflected in minimal increases expected by surveyed employers in the fourth quarter of 1992 (2.6%), the first quarter of 1993 (3.1%), the second quarter of 1993 (3.4%), the third quarter of 1993 (2.6%), the fourth quarter of 1993 (2.5%), and throughout 1994 (2.9%). Responses varied somewhat for various employer categories.

A generally optimistic outlook was reported by surveyed employers. From 58.9% to 77.7% expected an improved job market. Only 3.3% to 10.3% predicted a decrease in the market.

What advice would you offer new college graduates who cannot find available or suitable job opportunities after hunting for more than six months following graduation?

Observations: For new college graduates who have not found available nor suitable job opportunities when hunting for more than six months after graduation, surveyed employers offered advice.

Most important, according to employers, was the recommendation that recent graduates continue to search--keep on trying (48)--for career opportunities matching their interests. Do not give up or get discouraged--be patient and persistent. Employers advised to search harder, especially in areas not directly related to your major field of study. Keep in mind that the current job market was caused by the economic forces, and it has nothing to do with you personally. Continue to search, because although the job market seems very closed, it is actually very open. Career opportunities do exist, if you can just find them.

Reevaluate your job search techniques and strategies (20). Learn to market yourself more effectively with employers. Become more aggressive in your job search. Prepare yourself more and present your best face to prospective employers. By fine tuning your interviewing skills and revising your resume, you can make a better impression with employers. Review your resume with an eye toward alternative occupations. Establish a goal to make a certain number of contacts each week. Follow-up with employers who turned you down for screening interviews. Seek feedback on your application materials--resume and letter of application. Contact the employers who interviewed you, but did not invite you for a second interview, and those who did not make a job offer after you visited their company. Get specific feedback on your interviewing performance. Finding a job today is a full-time task.

Make sure, when approaching potential employers, to address each organization's background and needs. Answer this question: Why would I fit well into this organization?

Gaining further career-related work experiences (43) might increase your chances of finding employment. Any experience is better than none. Maintaining even a part-time position demonstrates your ability to work and hold a job. As examples of other work experiences, employers recommended volunteer positions, unpaid work, and internships to get a foot in the door.

Try any reasonable job available in your field of interest to gain experience (75) and build a list of references. Take any position with a company employing your major or accept a position at a lower level in a stable, reputable organization. In time, you can work into your preferred area of employment. Give a higher priority to how closely the job relates to your chosen occupation than initial starting salary. Many college graduates have taken positions at lower than desired levels and been promoted as reward for outstanding job performance. Allow the employer to promote you as an internal move, which is easier during hiring freezes and restructuring periods.

Be willing to take anything you can get (37), even if it is not in your field of study, at least on an interim basis. This will show you are trying. Start to work. Do something. Even part-time or temporary positions were suggested as avenues for landing full-time employment. Put egos aside and get a foot in the door despite the fact the job is not exactly what you wanted. This will provide you with an inside look at potential opportunities. Get any work experience you can to list on your resume. Be willing to start at an entry-level position and work your way up the career ladder in an organization. During these work experiences, you can maintain professional contacts, establish

an excellent work record, increase your responsibilities, and demonstrate your professionalism to prospective employers. Taking even a menial job will show prospective employers that you are not afraid of hard work and that no work assignment is beneath you. Even the most routine job can turn into something if you perform your work very well and above and beyond expectations. As career-related opportunities occur, transfers or promotions to more desired jobs will be possible.

An employer will likely prefer a person who has been steadily employed over one who has been unemployed for six months or more. Therefore, any work experience is more valuable than no experience at all.

Redefine your career goals and expectations (26). Lower your sights. Establish short-term as well as long-term goals. Show a positive attitude. Expand your scope of interests to a broader market. Think about what you can do for an organization. Do not be insulted by having to start at a lower level (either salary or position) than expected. Too many job applicants are approaching employers with more experience than new college graduates.

According to surveyed employers, only the best will be placed within major organizations. Therefore, individuals who cannot find available opportunities should reevaluate the positions they are seeking, the salaries they think they want, the job market they are facing, and the companies they may be targeting for employment.

Become an entrepreneur (15), and start your own business. Sign up with a temporary agency to be employed on long- or short-term assignments. Working for a temporary service will permit you to see what opportunities are available inside several organizations.

Network yourself into a full-time job (19). Make personal telephone calls to schedule informational interviews. Join professional organizations related to your field of study and keep updated on current trends in your field. Continuing to network will yield results, because turnover in most organizations results in some job openings. Utilize all resources and contacts. Make as many contacts as you can with people in all types of businesses and industries.

According to employers, networking is often the best way for a new graduate to uncover opportunities. Graduates should persistently and courteously contact former employers, intern supervisors, faculty, family, friends, alumni, and other graduates who have found jobs.

Contact prospective employers in your preferred occupational areas and ask for things to do, while waiting for openings, to improve your skills and increase your chances for employment in that company.

Utilize assistance from your college placement office or career center (5). Seek professional opinions to rate your true marketability. Work with a career counselor to assess your skills and job campaigning techniques. Be willing to make adjustments as necessary.

Keep all options open and be flexible (31) about geographical location, starting salary, travel, and entry level assignments, advised employers. Look into positions available in other states, and keep an open mind about the possibilities of available positions in other academic major. Broaden your fields of search.

Take a look at small to medium sized firms (3). These organizations said they rarely fill their entire hiring quotas with new recruits each year. In their opinions, there seem to be more jobs than graduating students in this area.

Be creative in your job search (9). Investigate smaller companies and organizations that may have needs. Investigate other professions. In addition, continue to personally research organizations and career alternatives.

Return to graduate school (52) or continue your education to make yourself more marketable. Graduate school is an especially attractive option if you can see a direct employment benefit from an advanced degree. However, a graduate degree without work experiences may make you seem too expensive for some employers to hire. Acquire new skills or train for a new career area (i.e. nursing, engineering, accounting, sciences, etc.). Seek vocational or educational training to ride out the current recession. Possibly gain expertise in a technical field with high demand. Returning to school on a part-time basis while maintaining a part-time job and continuing to look for an entry-level position was especially encouraged. Stay current with your skills by taking a course or two, especially in technical fields, because when opportunities surface, you must be ready.

Did your organization experience **shortages of candidates** in any academic majors or degree levels last year (1991-92) when recruiting new personnel?

	Shortage of Candidates When Recruiting			
	Yes		No	
Employer Types	Number of Employers	Percent	Number of Employers	Percent
Accounting	.	.	8	100.0%
Aerospace	1	10.0%	9	90.0%
Agribusiness	1	10.0%	9	90.0%
Automotive	3	21.4%	11	78.5%
Banking, Finance	2	10.5%	17	89.4%
Chemicals	4	30.7%	9	69.2%
Communication	1	8.3%	11	91.6%
Construction	1	7.6%	12	92.3%
Conglomerates	1	33.3%	2	66.6%
Electronics	5	18.5%	22	81.4%
Engineering, Consulting & Prof. Svcs.	7	15.9%	37	84.0%
Food Processing	1	11.1%	8	88.8%
Glass/Packaging	1	12.5%	7	87.5%
Government	4	16.6%	20	83.3%
Hospitals	12	63.1%	7	36.8%
Hotels Motels	2	15.3%	11	84.6%
Lumber Products	.	.	9	100.0%
Merchandising	1	4.5%	21	95.4%
Metals	2	11.1%	16	88.8%
Petroleum	.	.	4	100.0%
Public Utilities	5	20.8%	19	79.1%
Service Org.	1	16.6%	5	83.3%
Textiles	1	16.6%	5	83.3%
Overall Totals	56	16.7%	279	83.2%

Observations: Of the 335 employers responding, 56 organizations (16.7%) experienced shortages of candidates last year (1991-92) when recruiting new personnel.

Listed below in alphabetical order with frequencies of response noted after each are the academic majors and degree levels reported by employers:

Chemical engineers (2)
Chemists
Computer science (3), MS candidates
Computer software engineers (6), computer information systems, computer programmers
Crop and soil scientists
Electrical engineers (3), especially with power emphasis.
Employment relations/personnel administration.
Geologists
Health physicists
Horticulturists
Hotel, restaurant, and institutional management majors for sales manager positions.
Industrial hygienists
MBA graduates with technical undergraduate degrees.
Mechanical engineers (4), especially those for research and development positions.
Medical technologists
Meteorologists
Mining engineers
Nuclear medicine technologists
Nurses (2)
Occupational therapists (5)
Pharmacists (4)
Physical therapists (7)
Radiation therapists (2)
Respiratory therapists
Software engineers (2), for design of circuits and development of software for electronic equipment.
Statistics and research methods, MS, PhD
Turf management specialists
Toxicologists

Hospitals and health care services most frequently experiences shortages of candidates for available positions (63.1%).

Does your organization **anticipate any forthcoming shortages** in academic disciplines? Responses are listed by EMPLOYER CATEGORY.

	Anticipate Shortage of Certain Candidate			
	Yes		No	
	Number of Employers	Percent	Number of Employers	Percent
Employer Types				
Accounting	1	12.5%	7	87.5%
Aerospace	2	20.0%	8	80.0%
Agribusiness	1	10.0%	9	90.0%
Automotive	1	7.1%	13	92.8%
Banking, Finance	1	5.5%	17	94.4%
Chemicals	5	38.4%	8	61.5%
Communication	.	.	12	100.0%
Construction	1	8.3%	11	91.6%
Conglomerates	.	.	3	100.0%
Electronics	4	14.8%	23	85.1%
Engineering, Consulting & Prof. Svcs.	8	18.1%	36	81.8%
Food Processing	2	22.2%	7	77.7%
Glass/Packaging	2	22.2%	7	77.7%
Government	4	16.6%	20	83.3%
Hospitals	7	38.8%	11	61.1%
Hotels Motels	1	7.6%	12	92.3%
Lumber Products	1	11.1%	8	88.8%
Merchandising	1	4.5%	21	95.4%
Metals	1	5.2%	18	94.7%
Petroleum	1	25.0%	3	75.0%
Public Utilities	6	26.0%	17	73.9%
Service Org.	1	16.6%	5	83.3%
Textiles	.	.	6	100.0%
Overall Totals	51	15.3%	282	84.6%

Observations: Anticipated shortages of academic disciplines were expected by 51 employers (15.3%) of the 333 responding.

These forthcoming shortages, as reported by surveyed employers, are listed below in alphabetical order with frequencies of response noted after each:

CAD/CAM expertise
Chemical engineers (2), especially minority candidates
Chemists, especially organic, PhD
Civil engineers
Computer scientists (8), computer software engineers, computer programmers, high speed networking systems, high speed digital design and superconductivity
Electrical engineers (2)
Engineers, all categories (4), PhD
Geologists
Geophysicists
Health physicists
Mechanical engineers (3)
Nuclear engineers
Occupational therapists (3)
Petroleum engineers (2)
Pharmacists (2)
Physical therapists (4)
Physical sciences (2), PhD
Software engineers

Has your organization experienced a shortage of **women recruits** for current or anticipated positions? Responses are listed by EMPLOYER CATEGORY.

	Shortage of Female Candidates			
	Yes		No	
Employer Types	Number of Employers	Percent	Number of Employers	Percent
Accounting	.	.	8	100.0%
Aerospace	3	33.3%	6	66.6%
Agribusiness	2	20.0%	8	80.0%
Automotive	9	69.2%	4	30.7%
Banking, Finance	.	.	19	100.0%
Chemicals	6	50.0%	6	50.0%
Communication	1	8.3%	11	91.6%
Construction	5	41.6%	7	58.3%
Conglomerates	.	.	3	100.0%
Electronics	12	44.4%	15	55.5%
Engineering, Consulting & Prof. Svcs.	17	39.5%	26	60.4%
Food Processing	.	.	9	100.0%
Glass/Packaging	3	33.3%	6	66.6%
Government	9	37.5%	15	62.5%
Hospitals	6	31.5%	13	68.4%
Hotels Hotels	.	.	13	100.0%
Lumber Products	1	12.5%	7	87.5%
Merchandising	5	22.7%	17	77.2%
Metals	6	33.3%	12	66.6%
Petroleum	1	25.0%	3	75.0%
Public Utilities	13	56.5%	10	43.4%
Service Org.	.	.	6	100.0%
Textiles	.	.	5	100.0%
Overall Totals	99	30.1%	229	69.8%

Observations: Shortages of women were experienced by 99 surveyed employers (30.1%) when recruiting for current or anticipated positions.

The employer categories reporting the highest percentage of actual or anticipated shortages of women applicants were automotive and mechanical equipment (69.2%); public utilities including transportation (56.5%); chemicals, drugs, and allied products (50.0%); electronics, computers, and electrical equipment manufacturers (44.4%); construction and building contractors (41.6%); engineering, research, consulting, and other professional services (39.5%); governmental administration and military including federal, state, and local levels (37.5%); aerospace and components (33.3%); metals and metal products (33.3%); glass, packaging, and allied products (33.3%); and hospitals and health care services (31.5%).

With fewer than 25% of employers reporting shortages of women applicants for current or anticipated positions were petroleum and allied products (25.0%); merchandising and retailing (22.7%); agribusiness (20.0%); lumber, wood products, and furniture manufacturers (12.5%); and communications and telecommunications including telephones, newspapers (8.3%).

No shortages of women recruits were reported banking, finance, and insurance; accounting firms; food and beverage processing; diversified conglomerates; hotels, motels, restaurants, and recreational facilities ; social service, religious, and volunteer organizations; and textiles, home furnishings, and apparel manufacturers.

Has your organization experienced a shortage of **minority candidates** for current or anticipated positions? Responses are listed by EMPLOYER CATEGORY.

	Shortage of Minority Candidates			
	Yes		No	
Employer Types	Number of Employers	Percent	Number of Employers	Percent
Accounting	2	28.5%	5	71.4%
Aerospace	5	50.0%	5	50.0%
Agribusiness	4	40.0%	6	60.0%
Automotive	7	58.3%	5	41.6%
Banking, Finance	8	47.0%	9	52.9%
Chemicals	10	76.9%	3	23.0%
Communication	6	54.5%	5	45.4%
Construction	6	50.0%	6	50.0%
Conglomerates	3	100.0%	.	.
Electronics	17	62.9%	10	37.0%
Engineering, Consulting & Prof. Svcs.	29	67.4%	14	32.5%
Food Processing	2	22.2%	7	77.7%
Glass/Packaging	4	44.4%	5	55.5%
Government	16	72.7%	6	27.2%
Hospitals	10	58.8%	7	41.1%
Hotels Motels	7	63.6%	4	36.3%
Lumber Products	2	40.0%	3	60.0%
Merchandising	15	71.4%	6	28.5%
Metals	11	64.7%	6	35.2%
Petroleum	3	100.0%	.	.
Public Utilities	12	52.1%	11	47.8%
Service Org.	3	50.0%	3	50.0%
Textiles	.	.	5	100.0%
Overall Totals	182	58.1%	131	41.8%

Observations: Qualified minority candidates were in short supply when recruiting for current or anticipated positions according to 182 surveyed employers (58.1%).

Reporting the highest percentage of employers with actual or anticipated shortages of minority candidates were petroleum and allied products (100.0%); diversified conglomerates (100.0%); chemicals, drugs, and allied products (76.9%); governmental administration and military including federal, state, and local levels (72.7%); merchandising and retailing (71.4%); engineering, research, consulting, and other professional services (67.4%); metals and metal products (64.7%); hotels, motels, restaurants, and recreational facilities (63.6%); electronics, computers, and electrical equipment manufacturers (62.9%); hospitals and health care services (58.8%); automotive and mechanical equipment (58.3%); communications and telecommunications including telephones, newspapers(54.5%); public utilities including transportation (52.1%); social service, religious, and volunteer organizations (50.0%); aerospace and components (50.0%); and construction and building contractors (50.0%).

With fewer than 50% reporting shortages of minority candidates were banking, finance, and insurance (47.0%); glass, packaging, and allied products (44.4%); lumber, wood products, and furniture manufacturers (40.0%); agribusiness (40.0%); accounting firms (28.5%); and food and beverage processing (22.2%).

No shortage of minority candidates was reported by employers in textiles, home furnishings, and apparel manufacturing.

Continued ...

Observations: According to surveyed organizations, shortages of women recruits and minority candidates were experienced or are anticipated when recruiting and hiring for available positions. Of employers reporting, 30.1% experienced shortages of women recruits, and 58.1% indicated shortages of minority candidates when job applicants.

Competition to recruit and employ top minority and women candidates was reported by surveyed employers as fierce, primarily because not enough of these groups were graduating from engineering schools (30). Especially needed were more minorities and women in electrical, civil, and chemical engineering and computer science majors. Shortages were continuing in other technical fields as well: physical sciences, mathematics, chemistry, and energy-related occupations.

Additional academic fields of study with reported shortages of minorities and women were accounting majors for public accounting, human resources consulting, retailing, sciences (particularly physical and biological sciences), MBA's with technical undergraduate degrees, production supervision, hotel/restaurant/institutional management, and marketing/sales majors.

Shortages of women were reported in agricultural production jobs. Employers also cited difficulty with recruitment of minorities and females for the traditionally male-dominated horticulture industry.

Recruitment of minorities and women was especially challenging when low percentages of these personnel were reported among current employees. Employers were going to schools further away from their immediate geographical areas to hire minority graduates, and many employers were making extra efforts to maintain exposure with minority and female engineering societies.

Serious attempts were made by employers to recruit new employees from these groups, but employers reported that there do not seem to be as many candidates available as in the past.

Some federal government agencies noted that they must hire new college graduates who have a degree and a grade point average of 3.5 or higher. For these employers, it has been difficult to find many minorities who meet these requirements and are willing to consider the government as an employer.

What **changes in recruitment practices** are anticipated in your organization or have been initiated during the last two years?

Observations: Surveyed organizations have initiated several changes in recruitment practices during the last two years. Among the most prominent adjustments were reduced campus visits, more specific selection criteria for hiring new college graduates, and a greater emphasis on hiring experienced applicants.

Decreased recruitment of new college graduates (47) was reported by several employers. These organizations visited fewer schools for on-campus interviewing and attended fewer career fairs. On college and university campuses that remained on employer recruiting schedules, an increased emphasis was placed on recruiting activities. For a few, campus recruiting was reduced to only local colleges and universities, and some organizations put hiring freezes into effect. In some of these organizations, recruitment of new personnel was used only to satisfy turnover.

Targeted schools or consortiums were more common (27), especially during lean times. More active involvement of senior managers with campus recruiting was promoted and key contacts were established at these schools where employers targeted their recruitment efforts. Especially from these institutions, an active applicant supply file was maintained. Historical data were used to determine the schools to target. New campuses were selected in areas where employers would like to eventually place trainees. Employers were developing core schools and improving their relationships with these schools. Scholarships, classroom presentations, and student information sessions continued at these schools. Employers worked more closely with local colleges and universities to upgrade their curriculum and identify new recruitment sources.

Hiring of more minority and women candidates was pursued (37), especially in areas where few existed. Schools with larger minority populations received additional attention from employers. Employers attended more minority job fairs. Other organizations contacted a number of schools for targeting women and minority organizations. Employers said they were going farther distances to recruit of minority candidates. They were more aggressive than ever in seeking minorities and women applicants. They also looked at universities with more minorities in their engineering schools and with campus minority groups to attract more candidates. They intended for maximum exposure and involvement with campus minority and women's organizations.

Employers used stronger cooperative education and internship programs (28). They placed more emphasis on interns and co-ops rotating into full-time positions. Co-op housing programs were initiated to help recruit college students into these opportunities. Top candidates were placed early into formalized internship and co-op programs, and employers intended to ultimately keep these individuals for full-time employment opportunities.

Some employers reported more use of college and university placement offices (16). They made greater efforts to develop closer relationships with college placement officials and initiated more attendance at campus career fairs. When positions were available, organizations took a more aggressive recruitment strategy than in the past. New recruitment brochures and high-tech display boards were used to help with these efforts, and these organizations now posted more job listings with campus career centers. On these selected

campuses, heavy marketing was used. Also noted was more recruiting in outside areas (i.e. malls, related businesses, etc.). In some cases, when an opening existed, the employers contacted the university placement office regarding the opening, and the placement office forwarded resumes. One employer was promoting a scholarship fund with a work commitment after the recipient graduates.

Surveyed employers targeted reduced costs for hiring and decreased time for filling openings (6).

Employers used advertisements in local newspapers (6) when hiring more new employees. Also reported were an increased reliance on employee referrals, networking, college faculty, and notices in professionals journals. Fewer college recruiters were needed, when these sources of new personnel proved successful.

Employers reported more entry level hires with a focus on internal training and subsequent promotions (5). Some hired new employees for hourly positions and selected their new management personnel from these individuals. More emphasis was placed on employee training and promotion of employees already in the organizations. More proactive recruiting of internal candidates was predicted. Staff development departments were established to assist current employees and new hires with their people and communication skills.

More specific selection criteria (10) were used by employers when recruiting new college graduates. Employers reported that they were much more selective about the candidates they hired. They used competitive assessment centers for second interviews as a technique to assist with the selection process. Greater emphasis was placed on college ratings (Gourman) and GPAs of new college recruits. In some organizations, applicants were not considered with a GPA of less than 3.0 on a 4.0 system, unless the applicants had relevant full- or part-time work experiences. Employers initiated a greater focus on specific academic majors, skills, and master's level candidates.

Numerous employers hired more experienced people (7). These employers shifted away from college recruiting and hired individuals with two to five years of experience, because more experienced individuals were available and already trained. As noted by these employers, with the number of people out of work these days, some positions were easier to fill.

Contacts were established with outplacement organizations (2) that worked with employers suffering from significant reductions in employment. Especially when companies were downsizing, this served as an excellent source of talented personnel.

Employers mentioned, as a change, that they had fewer middle management personnel on their staff (3). As recruitment resumed in 1993 and 1994, employers were beginning to grow again, but expected no more loading at the middle management level.

More disabled people will be hired (2) because of the new Americans with Disabilities Act legislation, according to employers.

Employers no longer need to use employment agencies or search firms (3). With a plentiful supply of new college graduates in most academic majors and employers' downsizing and outplacing excellent experienced personnel in many hiring categories, the need for employment agencies decreased.

Some organizations added more structure to their college recruiting programs (2). The recruitment process was formalized in an effort to standardize procedures among managers and divisions.

Has your organization participated in any of the following **recruitment programs for entry-level personnel?** Responses are listed for each RECRUITMENT PROGRAM.

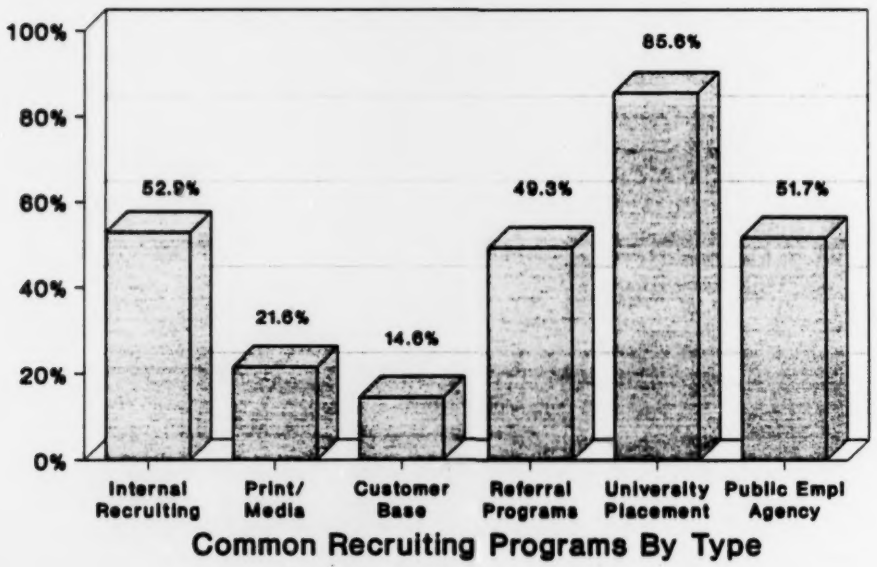
	Utilized Recruitment Program				Total Response	
	Yes		No			
Recruitment Programs	N	PCTN	N	PCTN	N	PCTN
Expanding Internal Recruitment	169	52.9%	150	47.0%	319	100.0%
Alternative Print Media	69	21.6%	249	78.3%	318	100.0%
Customer Base	46	14.6%	267	85.3%	313	100.0%
Referral Programs	155	49.3%	159	50.6%	314	100.0%
University Placement Offices	286	85.6%	48	14.3%	334	100.0%
Public Employment Agencies	165	51.7%	154	48.2%	319	100.0%

Observations: Surveyed organizations used many of the following recruitment programs when seeking new college graduates for entry-level positions. Among the 334 employers reporting, some programs were used more extensively than others.

The most frequently used recruitment programs, according to surveyed employers, were activities with college and university placement offices (85.6%), working with public employment agencies and public-funded job training programs--i.e. JTPA, etc. (51.7%), expanded internal recruitment within the organization (52.9%), and establishing employee referral programs (49.3%).

Used less frequently by employers were alternative print and electronic media--cable TV, direct mail, computer networks, etc. (21.6%) and recruiting from the customer base--point of purchase recruiting (14.6%).

RECRUITMENT PROGRAMS FOR ENTRY-LEVEL
Use by percentage of surveyed employers



What are the **current, most serious problems** faced by your personnel representatives when recruiting on college campuses?

Observations: The most serious problems facing personnel representatives when recruiting on college campuses this year were limited numbers of minorities and women candidates, unrealistic expectations from graduating students, and the need for more career-related work experiences from job applicants.

Limited numbers of minorities and women candidates (39) were available, according to surveyed employers. Academic majors with too few graduates to meet demand included engineering, retailing, business, and the physical sciences. Surveyed employers reported difficulty in tapping into the minority population and maintaining a diverse workforce.

Unrealistic expectations (23) were expressed by many students who were not satisfied with entry-level positions and beginning wages, according to employer reports. Students' unrealistic expectations included initial pay, desired job functions, and locations. They wanted to start at the top. College graduates were expecting high salaries handed to them instead of earning responsibility commensurate with salary increases. Students lacked understanding of the efforts necessary for success in the outside world. Other employers reported that graduating students were unaware of employers' different responsibilities, did not have the ability to express interest in a particular job option, and lacked direction (no long term goals).

New college graduates who cared more about their careers than their social lives were difficult to find. Students fitting the specific needs of employers were also lacking.

Prior work experiences (20) were desired by surveyed employers, but too many recent college graduates had little or no solid work history. Employers cited related work experiences as especially important in a competitive world with many new college graduates for few openings. Employers noted that it was to their disadvantage to recruit new graduates with no "real-world" work experience when current workforces were lean. During these times, employers looked instead for experienced people when openings occurred. New graduates were encouraged to get hands-on experiences through internships, part-time jobs, and technical assignments in areas related to their degree plans.

Gaining access to the best students (10) and attracting top notch academic achievers was another problem, especially when this pool of applicants seemed to be shrinking. When employers were recruiting on college campuses, employers lacked the ability to completely pre-screen, which concerned them. It was also difficult to find recruits with enthusiasm, real interests in careers with their organizations, and enough initiative to follow-up after interviewing. Another challenge was identifying those candidates with a maturity level high enough to handle major responsibilities.

Name recognition and image of the organization (13) caused challenges for numerous employers. The stock brokerage industry, financial services organizations, retailing, paper mills, sales occupations, tobacco companies, the military, small towns, and certain geographical locations were cited as examples of especially difficult areas. According to employers, communicating knowledge about the company or industry was a time-consuming and expensive task.

Employers reported an abundance of uninformed and poorly prepared graduating students (14). These individuals had poor job hunting skills, neglected to research companies before interviewing, submitted poorly written and designed resumes, and demonstrated marginal interviewing skills. Employers were disturbed by graduating students' lack of preparation for job hunting and their presentations during interviews. The economy, cited as

a possible cause, affects students' attitudes; however if students want to work, they must try harder. For example, graduating students do not ask relevant questions. Also, candidates were not giving straight-forward answers during interviews. They tried to tell the interviewer what they thought he or she wanted to hear.

Employers also cited, as a problem, students who were so well-trained in interview preparation that they sounded like clones of each other and did not exhibit individuality.

Placement personnel and career development offices lacked the customer services touch (10), according to surveyed employers. On certain college campuses, placement personnel were not in touch with the needs of the employers, nor were they providing the services employers desired (i.e. preselection of candidates on interviewing schedules, etc.). Communicating with the right students was sometimes difficult (i.e. publicity, interview signup procedures, etc.). Placement office personnel sometimes made mistakes that adversely affected recruiting. For instance, employers mentioned that getting assistance from placement office staffs for referral of promising applicants was impossible. Also, since graduating students would try anything they could get for a job, many students on college campuses that allowed open signups for interviewing signed up for interviews when they did not meet the employers' qualifications.

Academic preparation (6) was also lacking, according to employers. A lack of interpersonal skills and ineffective communication abilities, especially oral and written, were most notable. There were also too many students with low grade point averages.

Employers noted a lack of real jobs to offer (32) and too many graduating students. Many employers mentioned limited numbers of available positions. Others operated in rapidly changing environments, so they were not always sure of the numbers of new hires necessary until the actual hiring time. In these same organizations, limited resources for recruitment activities and uncertain budgets were real challenges. As examples, starting salaries were not competitive with other sectors of the job market and budgets were too limited to fill vacant positions. Further compounding this problem, employers were short on time to adequately interview and hire recent graduates when positions became available, and they faced tremendous competition from larger organizations that could afford to pay higher starting salaries. Some employers lacked the ability to make immediate job offers because of their budget situations. Also, limited human resources personnel were available for on-campus interviewing schedules and career fairs.

25. For **job openings anticipated this year** (1992-93) in your organization, what academic majors will be required?

Observations: ACADEMIC MAJORS required for job openings anticipated this year (1992-93) in surveyed organizations are listed below in alphabetical order with frequencies of response noted after each:

All majors, all colleges (3)
Accounting (55), auditor, BS, MBA
Actuarial science (2)
Advertising (2), BA, MA
Aerospace engineering (2), BS, MS
Biology (5)
Botany (1)
Building Construction (4)
Chemistry (15), BS, MS, PhD, and polymer
Chemical engineering (22), BS, MS
Civil engineering (12)
Computer engineering (8)
Computer science (28), BS, MS, systems analysts, and programmer analysts
Crop science (1)
Data processing (13), management information systems, programming, systems analysts
Design engineering (2)
Development engineering (1)
Dietetics (1)
Economics (3), agricultural economics
Electrical engineering (59), BS, MS
Employment relations (1)
English (1)
Engineering- all categories (18)
Engineering technology (2)
Environmental engineering (3)
Environmental science (2)
Finance (19)
Food science (3)
Food systems economics and management (1)
Forestry (1)
General business administration (40), international business
Geology (2)
Horticulture (2)
Hotel, restaurant, and institutional management (7)
Human resources management (3)
Industrial distribution (2)
Industrial engineering (14), BS, MS
Industrial management (2)
International relations (1)
Journalism (1)
Juvenile court caseworker (1)
Liberal arts (20), social science, and communications majors for retailing, sales, and banking
Library science (1), MLib
Marketing (29), and sales
Mass media communications (1)
Mathematics (5), BS, MS, and applied mathematics
Materials and logistics management (10), purchasing, transportation, logistics
Materials science (4)
MBA's (13) in accounting, business management, finance, human resources, management, or technical undergraduate degrees.
Mechanical engineering (59), BS, MS
Medical technologists (2)
Merchandise management/ retailing (5), and fashion merchandising
Meteorology (1)
Microbiology (1)
Mining engineering (2) BS, MS
Nuclear medical technologist (1)
Nurses (4), and nurse practioners
Occupational therapists (4)
Operations research- systems science (3)
Packaging (5)
Paper engineering (1)
Personnel administration (1)
Pharmacy (2), Pharm.D.
Physical sciences (1)
Physical therapist (5)
Physicists (4), health physicists
Plastics engineering (1)
Process engineering (1)
Production engineering (4)
Production management (2)
Research analyst (1)
Resource development (2)
Resource management (1)
Respiratory therapist (1)
Sanitary engineering (1)
Social Workers (2), MSW
Software engineering (5)
Soil science (1)
Statistics (2), MS
Structural engineering (2)
Systems engineering (1)
Toxicology (1)
Transportation engineering (1)
Wood technology (1)

What **percentage change** does your organization expect in **starting salary offers** to new college graduates hired this year (1992-93) when compared to 1991-92? Responses are listed for each ACADEMIC MAJOR and DEGREE LEVEL hired by an organization.

Academic Majors	Number of Employers	Anticipated Increase for 1992-93
Bachelor's Degree Graduates		
Civil Engineering	127	1.3%
Marketing/Sales	97	1.3%
Computer Science	140	1.2%
Hotel, Rest. Inst. Mgt.	107	1.2%
General Business Admin.	101	1.2%
Physics	126	1.2%
Liberal Arts/Arts & Letters	126	1.2%
Social Science	115	1.1%
Education	115	1.1%
Agriculture	121	1.0%
Advertising	79	0.9%
Chemical Engineering	86	0.9%
Accounting	76	0.8%
Retailing	60	0.8%
Telecommunications	60	0.8%
Communications	68	0.8%
Industrial Engineering	58	0.7%
Chemistry	58	0.7%
Geology	67	0.6%
Electrical Engineering	70	0.6%
Financial Administration	63	0.6%
Mechanical Engineering	67	0.6%
Journalism	62	0.6%
Natural Resources	65	0.5%
Mathematics	59	0.4%
Human Ecology/Home Econ.	59	0.4%
Personnel Administration	54	0.4%
Nursing	132	-0.6%
Advanced Degree Graduates:		
MBA	115	1.2%
Masters	126	1.1%
Ph.D.	132	-0.6%

Observations: Contained on this chart are the average starting salary increases expected by employers who will be hiring the academic majors and degree levels listed. Starting salary offers for new bachelor's, master's, and doctoral degree graduates are expected to vary considerably between academic majors.

Highest among anticipated increases for this year (1992-93) are expected to be civil engineering (1.3%); marketing/sales (1.3%); computer science (1.2%); hotel, restaurant, and institutional management (1.2%); general business admininistration (1.2%); physics (1.2%); liberal arts/arts and letters (1.2%); social science (1.1%); education (1.1%); and agriculture (1.0%).

Increases of less than 1% are expected for advertising (0.9%); chemical engineering (0.9%); accounting (0.8%); retailing (0.8%); telecommunications (0.8%); communications (0.8%); industrial engineering (0.7%); chemistry (0.7%); geology (0.6%); electrical engineering (0.6%); financial administration (0.6%); mechanical engineering (0.6%); journalism (0.6%); natural resources (0.5%); mathematics (0.4%); human ecology/home economics (0.4%); and personnel administration (0.4%).

For nursing (-0.6%), a decrease in starting salary offers is expected, because some hospitals and health services required reductions in salaries for their current staff. Therefore, starting salaries were expected to decrease proportionately.

Starting salary increases were also expected for MBAs (1.2%) and master's degree graduates (1.1%). However, for doctoral degree graduates, decreases were expected (-0.6%).

ESTIMATED STARTING SALARIES FOR NEW COLLEGE GRADUATES of 1992-93

Bachelor's Degree Graduates

Academic Majors	Estimated %Change	Estimated Starting Salary for 1992-93*
Chemical Engineering	0.9%	$40,173
Mechanical Engineering	0.6%	$35,619
Electrical Engineering	0.6%	$35,141
Industrial Engineering	0.7%	$32,574
Computer Science	1.2%	$31,572
Civil Engineering	1.3%	$29,592
Nursing	-0.6%	$29,452
Physics	1.2%	$29,367
Chemistry	0.7%	$27,750
Accounting	0.8%	$27,566
Marketing/Sales	1.3%	$26,165
Financial Administration	0.6%	$24,607
Geology	0.6%	$24,144
Mathematics	0.4%	$23,643
Agriculture	1.0%	$23,319
Hotel, Rest. Inst. Mgt.	1.2%	$23,103
Natural Resources	0.5%	$22,779
General Business Admin.	1.2%	$22,601
Education	1.1%	$22,554
Telecommunications	0.8%	$22,060
Retailing	0.8%	$21,390
Liberal Arts/Arts & Letters	1.2%	$21,011
Personnel Administration	0.4%	$20,833
Human Ecology/Home Economics	0.4%	$20,687
Communications	0.8%	$20,619
Social Science	1.1%	$20,348
Advertising	0.9%	$19,776
Journalism	0.6%	$19,114
Averages for Graduate Degree		
MBA	1.2%	$39,143
Masters	1.1%	$35,289
Ph.D.	-0.6%	$37,755

*Source: Average annual starting salaries for 1991-92 were used from the Collegiate Employment Research Institute. 1992. Salary Report 1991-92. East Lansing, Michigan: Career Development and Placement Services, Michigan State University, and the College Placement Council's Salary Survey for 1991-92, September 1992. Bethlehem, PA.: College Placement Council, Inc.

Observations: Highest among starting salaries this year for bachelor's degree graduates were chemical engineering ($40,173), mechanical engineering ($35,619), electrical engineering ($35,141), industrial engineering ($32,574), computer science ($31,572), civil engineering ($29,592), nursing ($29,452), and physics ($29,367). The greatest increases in starting salary offers this year were for marketing/sales (1.3%); civil engineering (1.3%); hotel, restaurant, and institutional management (1.2%); computer science (1.2%); physics (1.2%); MBA's (1.2%); general business administration (1.2%); and liberal arts/arts & letters (1.2%).

Does your organization **offer a "parachute"** to new college hires as part of your benefits package to protect or insure them in the event of a layoff, merger, downsizing, reorganization, or acquisition?

	Response Categories												
	Always		Almost Always		Sometimes		Seldom		Never		Total Response		To-tal
	N	PCTN	N	PCTN	N	PCTN	N	PCTN	N	PCTN	N	PCTN	MEAN
Offers of Parachute for Layoff													
Frequency	8	2.5%	1	0.3%	8	2.5%	17	5.3%	284	89.3%	318	100.0%	4.8

Observations: In general, most employers do <u>not</u> offer new college graduates a "parachute" as part of their benefits package to protect the new graduates against layoffs, mergers, downsizing, reorganization, or acquisitions. Of 318 employers responding, only 17 organizations (5.4%) "always," "almost always," or "sometimes" offered this option to new graduates as part of their benefits package.

<u>Severance pay</u> was offered to new hires by some organizations (5) and was based on salary and years of service with the organizations. If new hires were laid off after their first year on the job, they would receive one week of pay (one week of pay per year of service). In another organization, there was a minimum of two weeks of severance pay and a maximum of 25 weeks. Severance pay in most organizations ranged from two weeks to four weeks. Another employer paid severance wages for eight weeks, and then extended this benefit for four more weeks if the individual agreed not to sue the organization.

In some organizations, costs were paid for outside <u>outplacement services</u>, and extended medical and dental benefits were paid beyond the last day worked. One company paid for outplacement services through a transition center that provided resume preparation, letters of application, computers, telephones, etc.

New employees of state agencies who were laid off were placed on priority re-hiring lists.

How many **campuses did your organization visit** for recruiting last year (1991-92), and how many campuses does your organization **expect to visit** this year (1992-93)? Responses are listed by EMPLOYER CATEGORY.

Campus Visits	Average Last Year	Average Expected	Percent Change From Last Year
	Mean	Mean	Mean
Employer Type			
Accounting	6.9	4.6	-33.3%
Aerospace	3.8	3.3	-13.1%
Agribusiness	5.6	7.7	38.0%
Automotive	12.3	12.0	-2.3%
Banking, Finance	18.3	20.6	12.6%
Chemicals	22.0	19.7	-10.6%
Communication	21.3	18.6	-12.5%
Construction	10.1	7.9	-21.6%
Conglomerates	30.7	31.7	3.2%
Electronics	15.0	14.0	-6.6%
Engineering, Consulting & Prof. Svcs.	15.1	14.5	-3.8%
Food Processing	10.0	11.9	18.8%
Glass/Packaging	12.3	13.3	8.1%
Government	10.3	7.6	-26.1%
Hospitals	10.2	8.4	-18.0%
Hotels Motels	4.5	4.6	3.4%
Lumber Products	3.3	4.2	27.2%
Merchandising	20.4	18.6	-9.0%
Metals	2.8	4.6	66.0%
Petroleum	15.5	11.0	-29.0%
Public Utilities	7.3	5.2	-28.5%
Service Org.	1.6	2.2	37.5%
Textiles	9.8	6.0	-38.9%
Overall Total	11.9	11.2	-6.2%

Observations: Employers responding to this year's survey expected additional decrease in the number of campuses visited (-6.2%) for interviewing new college graduates. For the last three years, campus visits have decreased: 27.7% in 1991-92, 4.9% in 1990-91, and 0.7% in 1989-90.

Increases in campuses visited were expected by metals and metal products (66.0%); agribusiness (38.0%); social service, religious, and volunteer organizations (37.5%); lumber, wood products, and furniture manufacturers (27.3%); food and beverage processing (18.9%); banking, finance, and insurance (12.6%); glass, packaging, and allied products (8.2%); hotels, motels, restaurants, and recreational facilities (3.4%); and diversified conglomerates (3.3%).

Those organizations expecting decreases in number of campuses visited were automotive and mechanical equipment (-2.3%); engineering, research, consulting, and other professional services (-3.8%); electronics, computers, and electrical equipment manufacturers (-6.7%); merchandising and retailing (-9.0%); chemicals, drugs, and allied products (-10.6%); communications and telecommunications including telephones, newspapers (-12.5%); aerospace and components (-13.2%); hospitals and health care services (-18.0%); construction and building contractors (-21.6%); governmental administration and military including federal, state, and local levels (-26.1%); public utilities including transportation (-28.6%); petroleum and allied products (-29.0%); accounting firms (-33.3%); and textiles, home furnishings, and apparel manufacturers (-39.0%);

30. What are the **new and emerging occupations** in your organization?

Observations: Several NEW AND EMERGING OCCUPATIONS were reported by organizations responding to this year's survey. Provided below in alphabetical order with frequencies of response noted after each are those listed by employers:

- Allied health care professionals (3), physical therapists, occupational therapists, and pharmacists
- Aquatic ecologist
- Biochemists
- Biomedical technologist
- Chemical safety engineers
- Chemists (3), for novel drug delivery systems research
- Chinese bilingual language specialist
- Clinical nurse specialists (1)
- Communications systems manager and sales
- Computer software engineer (14), computer network engineer, information systems specialists, computer programmers, specialized programmers for AS 400
- Corrosion engineers
- Customer support and sales representative
- Distribution/operations, with inside and outside sales functions
- Environmental and health safety analyst (16), safety engineer, environmental engineer, environmental/ industrial hygienist, environmental researcher, power plant
- Financial planner, fund developers
- Industrial engineers
- Integrated pest management
- International marketing representative (3) with second and third language skills
- Logistics specialist
- Management and economic development specialist
- Mechanical engineers for technical sales
- Nuclear medicine
- Pattern engineers, technical designers, fabric technicians, and production assistants
- Performance management analysts
- Photo/laser research and design specialist
- Physical therapist
- Power quality analyst
- Process engineer
- Production engineer
- Production manager
- Project engineer, manager
- Quality assurance engineer (3), quality assurance manager
- Right of way agent
- Sales/service representative (10), direct marketing representative, retail management trainee, account executive-outside sales, product champions, product managers
- Security service supervisors
- Stock brokers, financial analysts, trading specialists, and operations analysts
- Technology transfer and deployment analyst, science and technology specialist, for developing new high-tech systems
- Toxicologist
- Ultrasonographer

31. What job categories in your organization this year (1992-93) are expected to yield the **most employment opportunities for new college graduates?**

Observations: **JOB CATEGORIES** expected to yield the most employment opportunities for new college graduates in surveyed organizations this year (1992-93) are:

Accountants (23), auditors, staff accountants, associate accountants, sales accountants
Actuarial (3)
Advertising account executives
Agronomists
Bank branch manager trainees (9), retail banking trainees, mortgage banking processors, mortgage closing trainees, commercial lending, community banking, business credit analysts
Caseworkers
Chemical engineers (4), process engineers, control engineers
Chemists (5)
Civil engineers (3)
Computer scientists (20), systems programmers, computer programmers, systems analysts, systems engineers, business systems analysts, computer applications development consultants, software engineers, control engineers
Construction superintendents
Consulting engineers
Controls engineers
Criminal investigators
Customer services trainees (2)
Department manager trainees
Development technologists
Electrical engineers (13)
Electronics engineers (2)
Engineers (37), all categories, research engineers, field engineers, consulting engineers
Environmental scientists (3), engineers
Financial planners (4), stock brokers, credit analysts, financial analysts
Food supervisor trainees (3), food service managers
Fund raising specialists
Geologists (3)
Hydrologists
Insurance underwriters (5), underwriting trainees, claims adjustersJuvenile court officers
Management trainees (4), interns
Merchandise management trainees (10), assistant buyers, merchandising executive trainees, store manager trainees, retail branch trainees
Mechanical engineers (9)
Medical technologists
Microbiologists, researchers
Microprocessor engineers
Occupational therapists (2)
Operations managers (2)
Packaging engineers
Personnel specialists (3), contract recruiters, training and development specialists
Pharmacists
Physical scientists
Physical therapists (2)
Process engineers (2)
Production/manufacturing managers (5), production manager trainees
Project engineers (2), assistant project engineers
Pulp and paper engineers
Quality assurance engineers
Research analysts (4), research and development engineers
Restaurant management trainees
Sales representatives (25), marketing representatives, trainees, sales/service representative, technical sales representatives, territory managers, marketing representatives, field service/ sales representatives, sales managers, customer sales representatives, account executives- outside sales
Tool design engineers
Transportation management specialists
Warehouse management trainees

Which of the following **compensation plans or retirement benefit packages** are offered to new college graduates hired by your organization? Responses are listed for each.

	Response Categories												
	Always		Almost Always		Sometimes		Seldom		Never		Total Response		To-tal
	N	PCTN	N	PCTN	N	PCTN	N	PCTN	N	PCTN	N	PCTN	MEAN
Compensation/-Benefit Packages													
Tuition Reimbursement	197	63.5%	30	9.6%	29	9.3%	14	4.5%	40	12.9%	310	100.0%	1.9
Skill-based Pay	97	34.3%	37	13.1%	29	10.2%	25	8.8%	94	33.3%	282	100.0%	2.9
Stock Ownership Plans	98	33.7%	1	0.3%	10	3.4%	9	3.1%	172	59.3%	290	100.0%	3.5
Bonuses	5	1.7%	4	1.3%	39	13.6%	28	9.7%	210	73.4%	286	100.0%	4.5
Incentive Pay Plan	24	8.3%	7	2.4%	42	14.5%	21	7.2%	195	67.4%	289	100.0%	4.2
Comparable Worth Pay	67	25.0%	18	6.7%	25	9.3%	16	5.9%	141	52.8%	267	100.0%	3.5
Profit/Gain Sharing	82	28.1%	10	3.4%	22	7.5%	12	4.1%	165	56.7%	291	100.0%	3.6
Higher Percentage Benefit Pay	92	34.7%	20	7.5%	35	13.2%	8	3.0%	110	41.5%	265	100.0%	3.1
Two-Tier Wage Plan	7	2.7%	3	1.1%	10	3.8%	14	5.4%	223	86.7%	257	100.0%	4.7
Annuities Based on Tenure	74	28.3%	9	3.4%	16	6.1%	7	2.6%	155	59.3%	261	100.0%	3.6
Defined Contribution Plan	182	64.5%	9	3.1%	11	3.9%	4	1.4%	76	26.9%	282	100.0%	2.2
Vested Benefits	208	73.2%	10	3.5%	8	2.8%	3	1.0%	55	19.3%	284	100.0%	1.9
Individual Retirement Accounts	81	31.7%	9	3.5%	5	1.9%	7	2.7%	153	60.0%	255	100.0%	3.6

Observations: One or another of the listed compensation plans and retirement benefit packages were offered to new college graduates hired by most surveyed employers (87.1%). Most frequently offered were vested benefits, tuition reimbursement for graduate studies or advanced degrees, and defined contribution plans. Of surveyed employers responding, 76.7% "always" or "almost always" provided vested benefits, 73.1% offered tuition reimbursement for graduate studies or advanced degrees, and 67.5% provided retirement contribution plans.

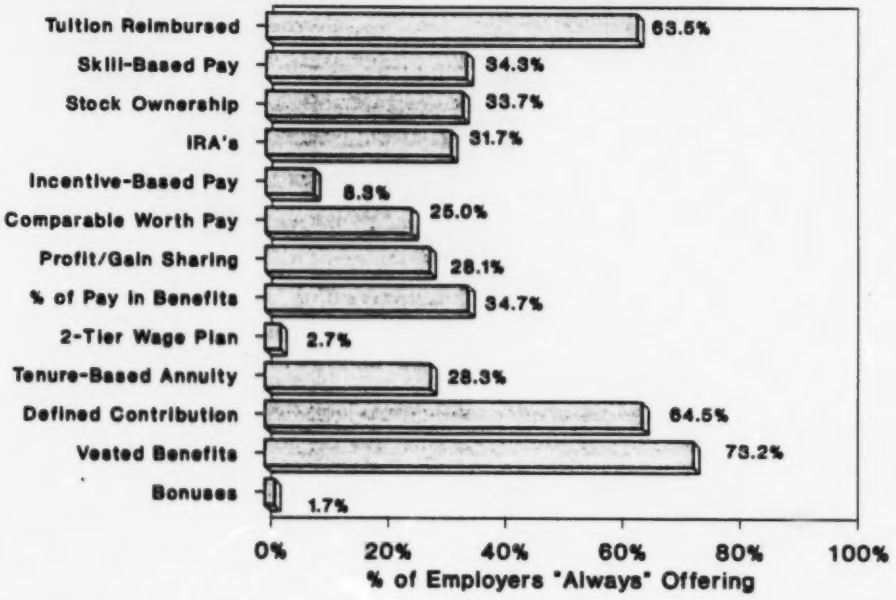
Sometimes offered were skill based/knowledge based pay and a greater percentage of before-tax pay in benefits. Of respondents, 47.4% "always" or "almost always" included skill based/knowledge based pay, and 42.2% "always" or "almost always" offered new college graduates the option of a greater percentage of before-tax pay in benefits.

Least frequently, or seldom, offered were employee stock ownership plans, replacement of raises with lump sum bonuses, group/team based incentive pay plans, comparable worth pay, profit sharing/gain sharing pay plans, two-tier wage and benefit plans, traditional annuities based on salary and length of service, and individual retirement accounts (IRA's).

Other compensation and benefit options mentioned by employers were commissions based on sales, bonuses, yolk matching programs, employee stock option programs, paid medical and dental benefits, paid vacation days, paid holidays, discounts on merchandise, life insurance, short-term disability, long-term disability, deferred compensation plans (401 K and 457), and thrift savings plans (similar to 401 K plans with matching employer contributions).

COMPENSATION & BENEFITS PACKAGES OFFERED

Percentage of Emloyers Offering By Type



How many new college graduates were interviewed by your organization on college campuses last year (1991-92), and how many were hired? Responses are listed by EMPLOYER CATEGORY.

Technical Graduates Hired Last Year	Number of Employers	Technical Graduates Interviewed	Technical Graduates Hired	
			Total Hired	Percent
Employer Types				
Accounting	6	0	0	.
Aerospace	9	312	29	9.2%
Agribusiness	7	632	43	6.8%
Automotive	12	752	51	6.7%
Banking, Finance	16	753	118	15.6%
Chemicals	9	4,819	171	3.5%
Communication	6	50	2	4.0%
Construction	11	2,440	220	9.0%
Conglomerates	3	3,700	380	10.2%
Electronics	19	3,662	501	13.6%
Engineering, Consulting & Prof. Svcs.	34	11,648	1,050	9.0%
Food Processing	7	105	8	7.6%
Glass/Packaging	8	633	50	7.8%
Government	15	860	232	26.9%
Hospitals	12	385	146	37.9%
Hotels Motels	8	0	0	.
Lumber Products	6	228	20	8.7%
Merchandising	12	110	20	18.1%
Metals	11	3,201	106	3.3%
Petroleum	3	1,200	89	7.4%
Public Utilities	19	846	108	12.7%
Service Org.	3	0	0	.
Textiles	4	472	28	5.9%
Overall Totals	240	36,808	3,372	9.1%

TECHNICAL GRADUATES INTERVIEWED:

Observations: After 240 surveyed employers interviewed 36,808 new technical college graduates on college campuses last year (1991-92), 3,372 were hired (9.1%).

Technical graduates, for purposes of this research, were identified as new college graduates in engineering, computer science, and natural sciences.

Percentage of new graduates hired by surveyed employers varied by employer category. Highest percentages among the employers categories were reported by hospitals and health care services (37.9%); governmental administration and military including federal, state, and local levels (26.9%); merchandising and retailing (18.1%); banking, finance, and insurance (15.6%); electronics, computers, and electrical equipment manufacturers (13.6%); public utilities including transportation (12.7%); diversified conglomerates (10.2%); aerospace and components (9.2%); engineering, research, consulting, and other professional services (9.0%); and construction and building contractors (9.0%).

Employer categories hiring fewer than 9.0%, the average, of technical graduates interviewed on college campuses last year were lumber, wood products, and furniture manufacturers (8.7%); glass, packaging, and allied products (7.8%); food and beverage processing (7.6%); petroleum and allied products (7.4%); agribusiness (6.8%); automotive and mechanical equipment (6.7%); textiles, home furnishings, and apparel manufacturers (5.9%); communications and telecommunications including telephones, newspapers (4.0%); chemicals, drugs, and allied products (3.5%); and metals and metal products (3.3%).

No technical graduates were interviewed by the following employer categories, according to responses from surveyed employers: hotels, motels, restaurants, and recreational facilities; social service, religious, and volunteer organizations; and accounting firms.

How many new college graduates were interviewed by your organization on college campuses last year (1991-92), and how many were hired? Responses are listed by EMPLOYER CATEGORY.

Nontechnical Graduates Hired Last Year	Number of Employers	Non-technical Graduates Interviewed	Non-technical Graduates Hired	
			Total Hired	Percent
Employer Types				
Accounting	7	1,319	206	15.6%
Aerospace	9	40	4	10.0%
Agribusiness	9	302	30	9.9%
Automotive	12	863	66	7.6%
Banking, Finance	16	4,575	472	10.3%
Chemicals	8	1,161	50	4.3%
Communication	6	450	14	3.1%
Construction	9	20	1	5.0%
Conglomerates	3	1,000	107	10.7%
Electronics	16	786	262	33.3%
Engineering, Consulting & Prof. Svcs.	35	8,348	775	9.2%
Food Processing	7	284	58	20.4%
Glass/Packaging	9	768	57	7.4%
Government	15	237	56	23.6%
Hospitals	11	330	32	9.6%
Hotels Motels	10	682	72	10.5%
Lumber Products	6	20	2	10.0%
Merchandising	14	19,638	814	4.1%
Metals	9	180	10	5.5%
Petroleum	3	651	69	10.5%
Public Utilities	19	246	25	10.1%
Service Org.	3	15	2	13.3%
Textiles	4	679	45	6.6%
Overall Totals	240	42,594	3,229	7.5%

NON-TECHNICAL GRADUATES INTERVIEWED:

Observations: Surveyed employers reported that 42,594 new non-technical college graduates were interviewed on college campuses last year (1991-92), and 3,229 were hired (7.5%).

Non-technical graduates, for purposes of this research, were identified as new college graduates with academic majors in business and the liberal arts.

The highest percentages of new non-technical college graduates interviewed on college campuses last year and hired by surveyed employers were reported by electronics, computers, and electrical equipment manufacturers (33.3%); governmental administration and military including federal, state, and local levels (23.6%); food and beverage processing (20.4%); accounting firms (15.6%); social service, religious, and volunteer organizations (13.3%); diversified conglomerates (10.7%); petroleum and allied products (10.5%); hotels, motels, restaurants, and recreational facilities (10.5%); banking, finance, and insurance (10.3%); public utilities including transportation (10.1%); aerospace and components (10.0%); lumber, wood products, and furniture manufacturers (10.0%); agribusiness (9.9%); hospitals and health care services (9.6%); engineering, research, consulting, and other professional services (9.2%); and automotive and mechanical equipment (7.6%).

The employer categories hiring fewer than 7.5%, the average, of non-technical graduates interviewed on college campuses last year were glass, packaging, and allied products (7.4%); textiles, home furnishings, and apparel manufacturers (6.6%); metals and metal products (5.5%); construction and building contractors (5.0%); chemicals, drugs, and allied products (4.3%); merchandising and retailing (4.1%); and communications and telecommunications including telephones, newspapers (3.1%).

How many new college graduates were interviewed by your organization on college campuses last year (1991-92), and how many were hired? Responses are listed by EMPLOYER CATEGORY.

Total Graduates Hired Last Year	Number of Employers	Total Graduates Interviewed	Total Graduates Hired: Total Hired	Total Graduates Hired: Percent
Employer Types				
Accounting	6	1,269	204	16.0%
Aerospace	9	352	33	9.3%
Agribusiness	8	914	70	7.6%
Automotive	12	1,365	77	5.6%
Banking, Finance	17	7,100	656	9.2%
Chemicals	9	6,688	287	4.2%
Communication	7	5,150	1,035	20.0%
Construction	9	2,390	213	8.9%
Conglomerates	3	4,700	487	10.3%
Electronics	19	6,521	1,271	19.4%
Engineering, Consulting & Prof. Svcs.	36	22,938	1,979	8.6%
Food Processing	7	389	66	16.9%
Glass/Packaging	8	1,351	97	7.1%
Government	16	1,267	313	24.7%
Hospitals	10	710	121	17.0%
Hotels Motels	11	652	80	12.2%
Lumber Products	6	248	22	8.8%
Merchandising	14	19,576	814	4.1%
Metals	9	3,326	112	3.3%
Petroleum	3	1,851	158	8.5%
Public Utilities	19	1,742	263	15.0%
Service Org.	3	15	2	13.3%
Textiles	4	1,151	43	3.7%
Overall Totals	245	91,665	8,403	9.1%

ALL COLLEGE GRADUATES INTERVIEWED:

Observations: Of 91,665 new college graduates interviewed on college campuses last year (1991-92) by 245 surveyed organizations, 8,403 were hired (9.1%).

The highest percentages of new college graduates interviewed on college campuses last year by surveyed employers and hired were reported by governmental administration and military including federal, state, and local levels (24.7%); communications and telecommunications including telephones, newspapers (20.0%); electronics, computers, and electrical equipment manufacturers (19.4%); hospitals and health care services (17.0%); food and beverage processing (16.9%); accounting firms (16.0%); public utilities including transportation (15.0%); social service, religious, and volunteer organizations (13.3%); hotels, motels, restaurants, and recreational facilities (12.2%); diversified conglomerates (10.3%); aerospace and components (9.3%); and banking, finance, and insurance (9.2%).

Hiring fewer than the average of 9.1% of graduates interviewed were construction and building contractors (8.9%); lumber, wood products, and furniture manufacturers (8.8%); engineering, research, consulting, and other professional services (8.6%); petroleum and allied products (8.5%); agribusiness (7.6%); glass, packaging, and allied products (7.1%); automotive and mechanical equipment (5.6%); chemicals, drugs, and allied products (4.2%); merchandising and retailing (4.1%); textiles, home furnishings, and apparel manufacturers (3.7%); and metals and metal products (3.3%).

During **interviewing situations,** how important are the following characteristics which could be displayed by a job applicant?

	Response Categories										Total Response		To-tal
	Extremely High		High		Medium		Low		No				
	N	PCTN	N	PCTN	N	PCTN	N	PCTN	N	PCTN	N	PCTN	MEAN
Applicant Characteristics													
Confident Attitude	72	22.8%	156	49.5%	84	26.6%	3	0.9%	.	.	315	100.0%	2.1
Well Spoken	81	25.4%	166	52.2%	69	21.6%	2	0.6%	.	.	318	100.0%	2.0
Polite	66	20.8%	171	54.1%	75	23.7%	4	1.2%	.	.	316	100.0%	2.1
Ease of Answering Questions	36	11.4%	129	40.9%	136	43.1%	13	4.1%	1	0.3%	315	100.0%	2.4
Appearance/ Dress	112	35.2%	161	50.6%	44	13.8%	1	0.3%	.	.	318	100.0%	1.8
Relaxed	85	26.8%	154	48.7%	75	23.7%	2	0.6%	.	.	316	100.0%	2.0
Professional Attitude	153	48.4%	139	43.9%	22	6.9%	2	0.6%	.	.	316	100.0%	1.6
Ability to Build Rapport	74	23.4%	123	39.0%	105	33.3%	13	4.1%	.	.	315	100.0%	2.2
Enthusiasm	109	34.4%	169	53.4%	36	11.3%	2	0.6%	.	.	316	100.0%	1.8
Smile/Good Humor	182	57.4%	117	36.9%	17	5.3%	1	0.3%	.	.	317	100.0%	1.5
Attentiveness-/Eye Contact	39	12.5%	138	44.2%	124	39.7%	11	3.5%	.	.	312	100.0%	2.3
Sincerity/Honesty	17	45.9%	11	29.7%	1	2.7%	.	.	8	21.6%	37	100.0%	2.2
Conversation Skills	74	23.6%	72	23.0%	95	30.3%	45	14.3%	27	8.6%	313	100.0%	2.6

Observations: During interviewing situations, it is important that new college graduates display some of the characteristics of an outstanding job prospect, according to surveyed employers.

Most important when interviewing, were a smile and good humor; a businesslike and professional attitude; eagerness and enthusiasm; and appearance, dress, neatness, and ensemble.

Continuing the list of very important characteristics for an excellent interview were the following: well-spoken, clear enuciation, and good diction; relaxed and unnerved; confident attitude; graceful manner and polite; ability to build rapport; sincerity and honesty; and good eye contact and attentiveness.

Less important, but still essential, were ease with answering questions and an ability to keep conversation flowing naturally, without pauses or hesitations.

Other factors considered when interviewing job applicants included determination, self-motivated and discipline, an ability to juggle many tasks, good academic credentials, and commitment toward attaining professional credentials.

After campus interviews, is it important that interviewees follow-up with a **"thank you" letter** to your organization's recruiters?

	Response Categories												
	Always		Almost Always		Sometimes		Seldom		Never		Total Response		To-tal
	N	PCTN	N	PCTN	N	PCTN	N	PCTN	N	PCTN	N	PCTN	MEAN
Follow-up Thank-You Letter Importance	74	23.6%	72	23.0%	95	30.3%	45	14.3%	27	8.6%	313	100.0%	2.6

Observations: Most employers (76.6%) recommended that new college graduates send "thank you" letters after interviewing on campus with recruiters or visiting employers at their location for second interviews. According to employers, it is an important gesture when applying for job opportunities, but it is rarely done. It makes a good impression and helps the interviewer remember the interviewee. For instance, when the hiring decision is close between two people, the thank you letter could be the deciding factor, according to employers.

Although thank you letters are not a necessary step in the selection process, they are a nice touch, and they do spark memory of your name with some employers. This shows a higher level of effort and interest on the candidate's part. This follow-up shows maturity, dedication, and professionalism. Many employers suggested that they could possibly help especially when candidates are not offered a position after their initial interviews. By not sending a letter after an interview, the applicant would miss that opportunity to present themselves and their interests again.

When employers are recruiting candidates for sales positions, many reported that the applicant must make the next move after the initial interview, and a thank-you letter would be an appropriate response.

Some employers mentioned that they get so many that they do not pay attention to who sends them and who does not (5). These employers indicated that a thank-you letter would be one more piece of paper that would not influence decisions already made.

Lastly, for the job applicants, thank-you letters are an additional cost for another piece of mail. If this letter contained pertinent information not included in the interview, then it was very important (i.e. transcripts, change of address, etc.). If thank you letters are sent, they should be original and well-written (perfect grammar, spelling, etc.). It is better <u>not</u> to send a letter than to send one that is poorly written.

How many **offers of employment** were extended by your organization last year (1991-92), and how many were accepted? Responses are listed by EMPLOYER CATEGORY.

TECHNICAL GRADUATES- JOB OFFERS EXTENDED:

Technical Grads Accepted Jobs	Number of Employers	Technical Grads Offered Jobs	Technical Grads Accepted Jobs	
			Total Hired	Percent
Employer Types				
Accounting	5	2	2	100.0%
Aerospace	8	57	45	78.9%
Agribusiness	7	87	43	49.4%
Automotive	11	83	63	75.9%
Banking, Finance	17	183	117	63.9%
Chemicals	11	337	182	54.0%
Communication	7	42	36	85.7%
Construction	11	530	282	53.2%
Conglomerates	2	110	100	90.9%
Electronics	17	827	491	59.3%
Engineering, Consulting & Prof. Svcs.	36	2,644	1,174	44.4%
Food Processing	7	20	10	50.0%
Glass/Packaging	7	58	44	75.8%
Government	12	283	216	76.3%
Hospitals	10	301	233	77.4%
Hotels Motels	9	6	6	100.0%
Lumber Products	7	52	20	38.4%
Merchandising	14	23	20	86.9%
Metals	12	197	130	65.9%
Petroleum	4	145	89	61.3%
Public Utilities	19	146	118	80.8%
Service Org.	4	0	0	.
Textiles	4	53	28	52.8%
Overall Totals	241	6,186	3,449	55.7%

Observations: Of 241 surveyed employers reporting 6,186 offers of employment extended to new technical college graduates last year (1991-92), 3,449 were accepted (55.7%).

Technical graduates, for purposes of this research, were identified as new college graduates in engineering, computer science, and natural sciences.

Employer categories reporting the highest percentage of offers accepted from technical college graduates were diversified conglomerates (90.9%); merchandising and retailing (86.9%); communications and telecommunications including telephones, newspapers (85.7%); public utilities including transportation (80.8%); aerospace and components (78.9%); hospitals and health care services (77.4%); governmental administration and military including federal, state, and local levels (76.3%); automotive and mechanical equipment (75.9%); glass, packaging, and allied products (75.8%); metals and metal products (65.9%); banking, finance, and insurance (63.9%); petroleum and allied products (61.3%); electronics, computers, and electrical equipment manufacturers (59.3%); chemicals, drugs, and allied products (54.0%); construction and building contractors (53.2%); textiles, home furnishings, and apparel manufacturers (52.8%); and food and beverage processing 50.0%).

Fewer than 50% of the offers of employment to technical college graduates were accepted from agribusiness (49.4%); engineering, research, consulting, and other professional services (44.4%); and lumber, wood products, and furniture manufacturers (38.4%).

For accounting firms; and hotels, motels, restaurants, and recreational facilities; 100% of their offers of employment to technical college graduates were accepted, but their number of offers were very small, 2 and 6, respectively.

No offers of employment to technical college graduates were reported by social service, religious, and volunteer organizations.

How many **offers of employment** were extended by your organization last year (1991-92), and how many were accepted? Responses are listed by EMPLOYER CATEGORY.

NON-TECHNICAL GRADUATES- JOB OFFERS EXTENDED:

Nontechnical Grads Accepted Jobs	Number of Employers	Non-technical Grads Offered Jobs	Non-technical Grads Accepted Jobs	
			Total Hired	Percent
Employer Types				
Accounting	6	356	176	49.4%
Aerospace	8	12	8	66.6%
Agribusiness	7	54	31	57.4%
Automotive	11	117	72	61.5%
Banking, Finance	17	654	461	70.4%
Chemicals	10	116	92	79.3%
Communication	8	42	31	73.8%
Construction	9	9	8	88.8%
Conglomerates	2	23	18	78.2%
Electronics	15	356	268	75.2%
Engineering, Consulting & Prof. Svcs.	34	2,066	804	38.9%
Food Processing	6	92	58	63.0%
Glass/Packaging	8	74	55	74.3%
Government	12	11	10	90.9%
Hospitals	10	53	35	66.0%
Hotels Motels	11	100	78	78.0%
Lumber Products	7	7	5	71.4%
Merchandising	15	1,122	917	81.7%
Metals	11	25	19	76.0%
Petroleum	3	26	17	65.3%
Public Utilities	19	147	82	55.7%
Service Org.	4	7	5	71.4%
Textiles	4	67	45	67.1%
Overall Totals	237	5,536	3,295	59.5%

Observations: Offers of employment were extended to 5,536 new non-technical college graduates last year (1991-92), according to 237 surveyed employers responding, and 3,295 graduates accepted (59.5%).

Non-technical graduates, for purposes of this research, were identified as new college graduates with academic majors in business and the liberal arts.

The highest percentage of offers accepted by non-technical college graduates were reported the following employer categories: governmental administration and military including federal, state, and local levels (90.9%); construction and building contractors (88.8%); merchandising and retailing (81.7%); chemicals, drugs, and allied products (79.3%); diversified conglomerates (78.2%); hotels, motels, restaurants, and recreational facilities (78.0%); metals and metal products (76.0%); electronics, computers, and electrical equipment manufacturers (75.2%); glass, packaging, and allied products (74.3%); communications and telecommunications including telephones, newspapers (73.8%); social service, religious, and volunteer organizations (71.4%); lumber, wood products, and furniture manufacturers (71.4%); banking, finance, and insurance (70.4%); textiles, home furnishings, and apparel manufacturers (67.1%); aerospace and components (66.6%); hospitals and health care services (66.0%); petroleum and allied products (65.3%); food and beverage processing (63.0%); automotive and mechanical equipment (61.5%); agribusiness (57.4%); and public utilities including transportation (55.7%).

Offers of employment were accepted by fewer than 50% of non-technical college graduates in the following employer categories: accounting firms (49.4%); and engineering, research, consulting, and other professional services (38.9%).

How many **offers of employment** were extended by your organization last year (1991-92), and how many were accepted? Responses are listed by EMPLOYER CATEGORY.

ALL COLLEGE GRADUATES- JOB OFFERS EXTENDED:

Total Grads Accepted Jobs	Number of Employers	Total Grads Offered Jobs	Total Grads Accepted Jobs	
			Total Hired	Percent
Employer Types				
Accounting	6	413	206	49.8%
Aerospace	8	69	53	76.8%
Agribusiness	7	141	75	53.1%
Automotive	10	115	86	74.7%
Banking, Finance	18	919	642	69.8%
Chemicals	11	539	352	65.3%
Communication	7	79	62	78.4%
Construction	9	235	141	60.0%
Conglomerates	2	133	118	88.7%
Electronics	16	2,824	2,249	79.6%
Engineering, Consulting & Prof. Svcs.	36	5,023	2,146	42.7%
Food Processing	7	112	68	60.7%
Glass/Packaging	7	122	89	72.9%
Government	14	548	366	66.7%
Hospitals	10	354	268	75.7%
Hotels Motels	10	88	69	78.4%
Lumber Products	7	59	25	42.3%
Merchandising	14	1,112	913	82.1%
Metals	11	216	143	66.2%
Petroleum	2	43	28	65.1%
Public Utilities	20	464	330	71.1%
Service Org.	4	7	5	71.4%
Textiles	4	120	73	60.8%
Overall Totals	240	13,735	8,507	61.9%

Observations: According to surveyed employers, offers of employment were extended to 13,735 new college graduates of all degree levels and academic majors last year (1991-92) by 240 organizations, and 8,507 job offers were accepted (61.9%).

The highest percentage of job offers were accepted by new college graduates seeking employment with the following employer categories: diversified conglomerates (88.7%); merchandising and retailing (82.1%); electronics, computers, and electrical equipment manufacturers (79.6%); communications and telecommunications including telephones, newspapers (78.4%); hotels, motels, restaurants, and recreational facilities (78.4%); aerospace and components (76.8%); hospitals and health care services (75.7%); automotive and mechanical equipment (74.7%); glass, packaging, and allied products (72.9%); social service, religious, and volunteer organizations (71.4%); public utilities including transportation (71.1%); banking, finance, and insurance (69.8%); governmental administration and military including federal, state, and local levels (66.7%); metals and metal products (66.2%); chemicals, drugs, and allied products (65.3%); petroleum and allied products (65.1%); textiles, home furnishings, and apparel manufacturers (60.8%); food and beverage processing (60.7%); construction and building contractors (60.0%); and agribusiness (53.1%).

Offers of employment were accepted by fewer than 50% of all college graduates seeking employment in the following employer categories: accounting firms (49.8%); engineering, research, consulting, and other professional services (42.7%); and lumber, wood products, and furniture manufacturers (42.3%).

How many **offers of employment** were extended by your organization last year (1991-92), and how many were accepted? Responses are listed by EMPLOYER CATEGORY.

COMPARISION OF JOB OFFERS EXTENDED TO ALL COLLEGE GRADUATES, TECHNICAL GRADUATES, AND NON-TECHNICAL GRADUATES:

	Number of Graduates Offered Positions			Technical Graduates Offered Positions			Nontechnical Grads Offered Positions		
	Number of Employers	Total Offered Positions	Average	Number of Employers	Total Technical Graduates	Percent	Number of Employers	Total Nontechnical Graduates	Percent
Employer Types									
Accounting	6	413	69	5	2	0.4%	5	351	84.9%
Aerospace	8	69	9	8	57	82.6%	8	12	17.3%
Agribusiness	7	141	20	7	87	61.7%	7	54	38.2%
Automotive	10	115	12	10	81	70.4%	10	42	36.5%
Banking, Finance	18	919	51	17	183	19.9%	17	654	71.1%
Chemicals	11	539	49	10	333	61.7%	10	116	21.5%
Communication	9	94	10	8	42	44.6%	8	37	39.3%
Construction	9	235	26	9	226	96.1%	9	9	3.8%
Conglomerates	2	133	67	2	110	82.7%	2	23	17.2%
Electronics	16	2,824	177	15	820	29.0%	15	356	12.6%
Engineering, Consulting & Prof. Svcs.	38	5,032	132	37	2,650	52.6%	36	2,066	41.0%
Food Processing	7	112	16	7	20	17.8%	6	92	82.1%
Glass/Packaging	7	122	17	7	58	47.5%	7	64	52.4%
Government	15	548	37	13	283	51.6%	13	11	2.0%
Hospitals	10	354	35	10	301	85.0%	10	53	14.9%
Hotels Hotels	11	88	8	10	6	6.8%	11	87	98.8%
Lumber Products	7	59	8	7	52	88.1%	7	7	11.8%
Merchandising	14	1,112	79	13	23	2.0%	13	1,086	97.6%
Metals	12	216	18	11	191	88.4%	12	25	11.5%
Petroleum	2	43	22	2	20	46.5%	2	23	53.4%
Public Utilities	20	464	23	19	146	31.4%	19	147	31.6%
Service Org.	4	7	2	4	0	0.0%	4	7	100.0%
Textiles	5	120	24	5	53	44.1%	5	67	55.8%
Overall Totals	248	13,759	55	236	5,744	41.7%	236	5,389	39.1%

Continued ...

Continued ...

Observations: According to surveyed employers, offers of employment were extended to 13,759 new college graduates of all degree levels and academic majors last year (1991-92) by 248 organizations. Of these, 5,744 offers were received by technical college graduates (41.7%), and 5,389 were offered to non-technical graduates (39.1%).

For purposes of this research, technical graduates were defined as new college graduates in engineering, computer science, and natural sciences. Non-technical graduates were considered as new college graduates with academic majors in business and the liberal arts.

Employer categories offering the most job opportunities (75% to 100%) for liberal arts, social sciences, arts and letters, and business majors were social service, religious, and volunteer organizations (100.0%); hotels, motels, restaurants, and recreational facilities (98.8%); merchandising and retailing (97.6%); accounting firms (84.9%); and food and beverage processing (82.1%).

Although governmental administration and the military did not identify their job openings as either technical or non-technical, from previous experience, most of their openings are available to liberal arts, social sciences, arts and letters, and business majors.

Good opportunities (50% to 74%) for liberal arts and business majors were provided by employers in banking, finance, and insurance (71.1%); textiles, home furnishings, and apparel manufacturers (55.8%); petroleum and allied products (53.4%); and glass, packaging, and allied products (52.4%).

Fewer than 50% of available job offers were received by liberal arts graduates seeking employment in engineering, research, consulting, and other professional services (41.0%); communications and telecommunications including telephones, newspapers (39.3%); agribusiness (38.2%); automotive and mechanical equipment (36.5%); public utilities including transportation (31.6%); and chemicals, drugs, and allied products (21.5%).

For the remaining employer categories, most of their job offers were received by new technical college graduates: construction and building contractors (96.1%); metals and metal products (88.4%); lumber, wood products, and furniture manufacturers (88.1%); hospitals and health care services (85.0%); diversified conglomerates (82.7%); and aerospace and components (82.6%).

What is the **approximate average cost of recruiting and hiring** a new college graduate (including any related costs, but excluding any training costs after hiring)? Responses are listed by EMPLOYER CATEGORY.

	Recruitment Cost Per New College Hire	
	Number of Employers	Average
Employer Types		
Accounting	1	$900
Aerospace	4	$2,063
Agribusiness	7	$3,459
Automotive	6	$21,800
Banking, Finance	7	$1,639
Chemicals	6	$2,000
Communication	6	$2,883
Construction	8	$2,900
Conglomerates	1	$200
Electronics	13	$5,154
Engineering, Consulting & Prof. Svcs.	28	$3,518
Food Processing	5	$2,250
Glass/Packaging	5	$6,628
Government	8	$5,376
Hospitals	11	$2,176
Hotels Motels	9	$880
Lumber Products	6	$4,700
Merchandising	10	$2,233
Metals	9	$2,575
Petroleum	3	$3,167
Public Utilities	9	$2,033
Service Org.	2	$350
Textiles	2	$2,638
Overall Totals	166	$3,738

Observations: The average cost of recruiting and hiring a new college graduate, according to surveyed employers, was $3,738. This included any related costs, but excluding any training costs after hiring.

Employer categories reporting the highest costs for recruiting and hiring were automotive and mechanical equipment ($21,800); glass, packaging, and allied products ($6,628); governmental administration and military including federal, state, and local ($5,376); and electronics, computers, and electrical equipment manufacturers ($5,154).

Reporting costs in the $2,000 to $5,000 range were lumber, wood products, and furniture manufacturers ($4,700); engineering, research, consulting, and other professional services ($3,518); agribusiness ($3,459); petroleum and allied products ($3,167); construction and building contractors ($2,900); communications and telecommunications including telephones, newspapers ($2,883); textiles, home furnishings, and apparel manufacturers ($2,638); metals and metal products ($2,575); food and beverage processing ($2,250); merchandising and retailing ($2,233); hospitals and health care services ($2,176); aerospace and components ($2,063); public utilities including transportation ($2,033); and chemicals, drugs, and allied products ($2,000).

Costs of less than $2,000 per new hire were reported by banking, finance, and insurance ($1,639); accounting firms ($900); hotels, motels, restaurants, and recreational facilities ($880); social service, religious, and volunteer organizations ($350); diversified conglomerates ($200).

Does your organization conduct **background checks** of new college hires?

	Response Categories												
	Always		Almost Always		Sometimes		Seldom		Never		Total Response		To-tal
	N	PCTN	N	PCTN	N	PCTN	N	PCTN	N	PCTN	N	PCTN	MEAN
Types of Background Checks													
Work Habits	102	38.7%	52	19.7%	41	15.5%	18	6.8%	50	19.0%	263	100.0%	2.5
Absenteeism	94	35.7%	40	15.2%	48	18.2%	26	9.8%	55	20.9%	263	100.0%	2.7
Work Attitudes/Ethic	105	39.9%	50	19.0%	38	14.4%	14	5.3%	56	21.2%	263	100.0%	2.5
Criminal Convictions	82	31.1%	20	7.6%	48	18.2%	30	11.4%	83	31.5%	263	100.0%	3.0
Alcohol Abuse	42	15.9%	20	7.6%	31	11.7%	40	15.2%	130	49.4%	263	100.0%	3.7
Drug Abuse	78	29.6%	16	6.0%	27	10.2%	29	11.0%	113	42.9%	263	100.0%	3.3
Excessive Litigations	25	9.5%	11	4.1%	25	9.5%	40	15.2%	162	61.5%	263	100.0%	4.2
Credit Bureau Checks	23	8.7%	13	4.9%	35	13.3%	30	11.4%	162	61.5%	263	100.0%	4.1
Driving Record	35	13.3%	17	6.4%	41	15.5%	39	14.8%	131	49.8%	263	100.0%	3.8
Worker Compensation Claims	10	3.8%	11	4.1%	22	8.3%	38	14.4%	182	69.2%	263	100.0%	4.4
Medical Records Analysis	33	12.5%	14	5.3%	23	8.7%	34	12.9%	159	60.4%	263	100.0%	4.0

Observations: Background checks of work habits (58.4%), absenteeism (50.9%), and work attitudes/ethics (58.9%) were "always" or "almost always" conducted by surveyed employers when hiring new college graduates. Less frequently checked were criminal convictions (38.7%), drug abuse (35.6%), history of excessive alcohol use (23.5%), driving records (19.7%), medical records analysis (17.8%), involvement with excessive litigations (13.6%), credit bureau checks (13.6%), and workers' compensation claims (7.9%).

For federal government employment, all new hires received an FBI background clearance. Additional reference and work performance checks were conducted by the personnel offices of government agencies on most new hires.

After new college graduates were hired, background checks for security clearances were completed, according to government defense contractors. For licensing with the Securities and Exchange Commission, all candidates must be checked in all the areas listed.

To check academic records of new hires and to confirm receipt of a degree, transcripts were requested by numerous employers.

What is the impact on your organization's hiring decision when a graduating student indicates **a desire to attend graduate school** in the near future (within one to three years after graduation)?

	Response Categories												
	Extremely Positive		Positive		Neutral		Negative		Extremely Negative		Total Response		To-tal
	N	PCTN	N	PCTN	N	PCTN	N	PCTN	N	PCTN	N	PCTN	MEAN
Views Toward Graduate School Level	28	8.7%	145	45.3%	114	35.6%	26	8.1%	7	2.1%	320	100.0%	2.5

Observations: When graduating students indicate a desire to attend graduate school in the near future (within one to three years after graduation), the impact on an employer's hiring decision can be anywhere from positive (54.0%), to neutral (35.6%), or negative (10.2%), depending upon application of the advanced degree coursework to the employer's situation. Also, part-time, evening hours only programs are received more positively.

When applying for employment, graduating students should understand that the prospective employer's first focus is on outstanding job performance. If an employer suspects that the applicant's primary interest is graduate study, rather than top job performance, then the individual's application will not be given very serious consideration. From the employer's perspective, this calls into question the candidate's commitment to a career in the employer's business.

This is especially true if attendance at graduate school will require termination of employment. If attendance at graduate school would be within commuting distance of the employer's work location, then the employer might be supportive. If the student selects graduate school, the employers would urge them to come back to reapply when their graduate studies are finished.

Positive support for graduate study can be expected from employers if coursework in the advanced degree program will be applied to their business. It depends upon the position. For research positions, advanced degrees are encouraged, because completion of additional education can assist with work activities. The amount of support also depends on whether the student plans to attend full- or part-time and what the student's intentions will be once they obtain the degree.

High turnover is a concern among employers. According to surveyed employer, students seldom return after getting an advanced degree. In these cases, employers do not recoup training losses experienced during the first two years new hires are on the job.

Some companies encourage all employees to advance their educational pursuits by offering 100% tuition support, so most employees do not leave the company to pursue higher education. Instead, they work and study at the same time.

One year on the job before quitting to attend graduate school is absolutely a problem for employers. According to employing officials, it takes about three years for a new hire to understand the best jobs and perform capably. For this reason, most employers expect 2-3 year commitments before offers will be extended. Again, depending upon the position to be filled, and the individual applying for the assignment, employers expect a return on their investment in terms of work performance for training time provided.

However, if the student indicates that attendance will be part-time (after working hours), then positive or neutral responses can be expected from employers.

If you were **recommending preparation needed from college and university experiences** for employment within your organization, what would you suggest?

	Response Categories												
	Always		Almost Always		Sometimes		Seldom		Never		Total Response		To-tal
	N	PCTN	N	PCTN	N	PCTN	N	PCTN	N	PCTN	N	PCTN	MEAN
Recommended Experiences for Preparation													
Campus Leadership	78	24.5%	116	36.4%	109	34.2%	14	4.4%	1	0.3%	318	100.0%	2.2
Student Organizations	73	22.8%	125	39.1%	104	32.6%	14	4.3%	3	0.9%	319	100.0%	2.2
Career-Related Work	189	58.1%	94	28.9%	39	12.0%	3	0.9%	.	.	325	100.0%	1.6
Internships/-Cooperatives	138	42.4%	115	35.3%	69	21.2%	3	0.9%	.	.	325	100.0%	1.8
Summer/Part-Time Employment	130	40.7%	136	42.6%	50	15.6%	2	0.6%	1	0.3%	319	100.0%	1.8
Other Work Experience	81	27.0%	126	42.0%	82	27.3%	8	2.6%	3	1.0%	300	100.0%	2.1
Computer Literacy	123	38.4%	125	39.0%	64	20.0%	6	1.8%	2	0.6%	320	100.0%	1.9
Communication Skills	226	69.9%	87	26.9%	10	3.0%	.	.	.	.	323	100.0%	1.3
Research/Anal-ytical Skills	66	20.6%	109	34.0%	123	38.4%	17	5.3%	5	1.5%	320	100.0%	2.3

Observations: When recommending preparation needed during college and university experiences for employment within the organizations surveyed, employers suggested that every one of the listed activities and preparations would "almost always" be helpful. Exact preparation would depend upon the position to be filled.

Most important, according to surveyed employers, were career-related work experiences and excellent communication skills. These preparations were "always" or "almost always" recommended by 87.0% and 96.8%, respectively, of the employers responding.

Very important, but receiving lower ratings, were summer and part-time employment (83.3%), internships/ cooperative education assignments (77.7%), computer literacy (77.4%), other work experiences (69.0%), participation in student activities and organizations (61.9%), campus leadership experiences (60.9%), and research/ analytical skills (54.6%).

Other preparations desired by employers were better mathematical skills, improved writing skills, excellent public speaking abilities, interviewing expertise, and an ability to analyze quickly and act decisively.

If a new college graduate hired by your organization was **found to be deficient in one or several skill or knowledge areas** which were critical for effective job performance after six months on the job, does your organization engage in one or more of the following procedures?

	Response Categories												
	Always		Almost Always		Sometimes		Seldom		Never		Total Response		To-tal
	N	PCTN	N	PCTN	N	PCTN	N	PCTN	N	PCTN	N	PCTN	MEAN
Response to Employee Deficiencies													
Discuss in Performance Appraisal Review	224	70.0%	77	24.0%	16	5.0%	1	0.3%	2	0.6%	320	100.0%	1.4
Initiate Discharge	4	1.2%	8	2.5%	166	53.0%	114	36.4%	21	6.7%	313	100.0%	3.4
Discuss and Review Options (ie training)	161	50.4%	108	33.8%	46	14.4%	2	0.6%	2	0.6%	319	100.0%	1.7
Offer Free Remedial Training	55	17.7%	61	19.6%	125	40.3%	45	14.5%	24	7.7%	310	100.0%	2.7
Offer Reimbursement for Training	20	6.6%	40	13.2%	117	38.7%	70	23.1%	55	18.2%	302	100.0%	3.3
Require Employee to Obtain Training	25	8.3%	38	12.7%	91	30.4%	64	21.4%	81	27.0%	299	100.0%	3.5

Observations: When new college graduates were hired by surveyed employers, they were sometimes found to be deficient in one or several skill or knowledge areas which were critical for effective job performance after six months on the job. In these situations, surveyed employers responded by discussing the deficiencies with the employee and by suggesting appropriate remedial training.

Pursued "always" or "almost always" by 94.0% of the surveyed employers was the option of discussing any deficiencies with employees in performance appraisal interviews. In the employee evaluation procedures of surveyed organizations, this was an early major step.

Used "always" or "almost always" by 84.2% of the surveyed employers was the option of discussing any deficiencies with employee and then reviewing remedial options, such as additional training needed. Used less frequently (37.3%) was the choice of offering remedial training within the organization to employees free of charge during working hours. The other alternative proposed to surveyed employers was communicating with the employee to either invest in remedial training or be discharged. This option was used by "always" or "almost always" by 21.0% of the surveyed employers.

Only a few surveyed employers (19.8%) were offering remedial training to employees with partial reimbursement outside working hours at an outside facility. Rather than this option, most of the employers offered remedial training within the organization to employees free of charge during working hours.

How would you rate the **effectiveness of affirmative action/EEO programs** in your organization?

Observations: The effectiveness of affirmative action/EEO programs in surveyed organization was rated from excellent to poor.

Excellent ratings (16) of effectiveness were reported by a select group of respondents. In these cases, affirmative action/EEO programs are active and realistic, but even then, hiring goals fall short of objectives. Another deficiency noted even in the best programs was the retention of African/Americans. For some of these programs, in-house EEO counselors are provided. All supervisors and employees receive thorough EEO training, and extremely small numbers of complaints have been received.

Very effective (32), very high, and very positive ratings were submitted by a few employers. These programs were effective in employing minorities and women; however, here again, they were ineffective in attracting sufficient minority candidates. Very good, above average, and successful were used to describe these programs that were taking aggressive, proactive stands on this issue and making good progress. These employers always considered EEO goals in hiring situations, but were still striving for better numbers.

Good and moderately adequate ratings (74) were received by affirmative action/EEO programs in some surveyed organizations, mostly because they needed more qualified minority candidates to fill hiring goals. Especially weak were hiring goals in technical areas (i.e. engineering, physical sciences, and business). At the executive levels of organizations, human resources administrators reported low minority representation, but at all other levels within surveyed organizations, minorities were well-balanced. According to these employers, it was time to address the "glass ceiling." Most employers were aware that their affirmative action/EEO programs were by no means "flagship", and they could be improved and more effectively implemented. These employers also said with more commitment from management, hiring goals might be easier to reach.

Fair and improving ratings (26) were registered for organizations needing more proactive affirmative action/EEO programs to make them more attractive to minority candidates. These employers were making concerted efforts with new hires, but they reported slow progress. Their affirmative action/EEO programs had not produced the necessary level of qualified candidates. These employers needed a larger pool of minority recruits for making selections.

Poor and minimally effective (12) results were reported by a few surveyed employers. These organizations recruited low numbers of minorities. Also, poor results were achieved for time and money spent. They cited poor vision and planning as causal factors. A few employers reported that their affirmative action/EEO programs were very effective until hiring freezes and downsizing occurred, when all progress was ceased.

Does your organization have a policy on sexual harassment and reporting of incidents? Responses are listed by EMPLOYER CATEGORY.

	Existence of Sexual Harassment Policy			
	Yes		No	
	Number of Employers	Percent	Number of Employers	Percent
Employer Types				
Accounting	3	50.0%	3	50.0%
Aerospace	10	100.0%	.	.
Agribusiness	7	87.5%	1	12.5%
Automotive	12	92.3%	1	7.6%
Banking, Finance	18	100.0%	.	.
Chemicals	12	92.3%	1	7.6%
Communication	11	91.6%	1	8.3%
Construction	10	83.3%	2	16.6%
Conglomerates	2	100.0%	.	.
Electronics	24	100.0%	.	.
Engineering, Consulting & Prof. Svcs.	41	93.1%	3	6.8%
Food Processing	8	88.8%	1	11.1%
Glass/Packaging	9	100.0%	.	.
Government	24	100.0%	.	.
Hospitals	17	94.4%	1	5.5%
Hotels Motels	10	83.3%	2	16.6%
Lumber Products	6	75.0%	2	25.0%
Merchandising	18	94.7%	1	5.2%
Metals	18	100.0%	.	.
Petroleum	3	100.0%	.	.
Public Utilities	24	96.0%	1	4.0%
Service Org.	2	66.6%	1	33.3%
Textiles	5	83.3%	1	16.6%
Overall Totals	294	93.0%	22	6.9%

Observations: Sexual harassment policies and reporting of incidents were prevalent among 93.0% of the surveyed organizations. Of 316 employers responding, 294 had a strict policy on sexual harassment and reporting of incidents.

Employees of most surveyed employers were aware of sexual harassment policies as a result of company training programs and were required to immediately report any incidents through specific organization channels. Although training was provided to all employees, special in-depth training was given to supervisors on their responsibilities. In most organizations, all reported incidents must be immediately and thoroughly investigated. All employees were trained to understand the illegal aspects of these incidents, and posters were displayed throughout facilities that directed employees to report their concerns through established company channels.

Formal, written policies were distributed to all new employees throughout the organizations indicating that sexual harassment charges would result in suspension or discharge, according to surveyed employers. The most effective policies left no doubts about the organization's response, and rigid enforcement was communicated.

The Americans with Disabilities Act (ADA) became effective on July 26, 1992. What policy changes, memoranda, or other work environment directive have been issued by your organization in response to this legislation?

Observations: When the Americans with Disabilities Act (ADA) became effective on July 26, 1992, policy changes, employee memoranda, or other work environment directives were issued by many of the surveyed organization in response to this legislation. Of 315 employers responding to this question, 291 reported changes.

Changes due to ADA required of surveyed employers were too numerous to mention, and ADA compliance effected many areas of the organizations, but among the changes listed were new employer and employee handbooks, hiring policy changes, elimination of pre-employment physicals, rennovation of physical facilities, revision of employment application forms, revised interviewing procedures, and reviews of all job descriptions.

Policies and procedures (33) were revised, updated, developed, written, and issued. In some organizations, ADA task forces or committees were appointed for this assignment, and "reasonable accommodation specialists" were assigned in a few organizations. Legal appointed counsel was included when revising organization policies and procedures, and legal counsel in some organizations assisted with training of all personnel on ADA issues. Numerous internal discussions were held on this subject.

Managers and supervisors were trained (60) through presentations and written materials, and posters were required to be placed on bulletin boards. Training information and written materials were distributed to supervisors.

Workplace evaluations (29) were used when checking work environments for reasonable accommodations for all employees. Facilities and physical plant installations were modified, updated, and improved. Physical spaces of work areas and access were reviewed to provide barrier-free work environments.

Awareness training of all employees (53) was mentioned often by employers. Any employees who interviewed, hired, or supervised personnel were provided with revised procedures and training. Heightened employee awareness was achieved which was a goal of this program. Bulletin board notices, training videos, and articles in company newsletters were created and used for all employees. Specific detailed policies in employee handbooks and manuals explained the new legislation and the organizations' responses to legal requirements.

Recruiter training (21), interviewing guidelines, written materials for recruiters, and presentations to campus team leaders were completed. Instructions for recruiters included interviewing questions appropriate for someone who is disabled, correct language, and actions. This training included materials for all human resources personnel-- receptionists, clerks, professionals, medical personnel, and anyone involved in the recruitment process. Other revised personnel forms included summary sheets and checklists.

Employment applications, interview forms, testing, and other personnel documents were modified (41) for ADA compliance, and all health-related questions were eliminated on applications. Other questions asked on applications were changed. Applicant data were revised. Required pre-employment procedures and tests were updated. No pre-employment medical exams were required until job offers were accepted. All medical, drug screening, and physical procedures were reviewed.

Aggressive recruitment efforts (7) have been initiated by some employers, since their organizations are looking for more disabled employees and seeking for ways to integrate them into their workforces. Other employers have noted more understanding about hiring the disabled.

Job descriptions (34) were updated and documented, including performance of essential job functions. In organizations that were previously in compliance, reviews of current job descriptions were initiated.

Advertisements and recruitment brochures (4) were revised to include ADA materials. EEO statements were revised to include handicapper discrimination clauses. Only essential job functions were listed on each job vacancy notice. Government agencies working with each surveyed organization were notified that the company would comply with the Americans with Disabilities Act (ADA).

The policies and practices of a few employers were revised a few years ago (3) when state laws changed to include disabled as a protected group. Thus, in these organizations, no new policy changes, memoranda, or other work environment directives were required when the ADA law became effective earlier this year.

What **changes have occurred in the work environment** of your organization during the last five years that will influence the qualifications needed by new college graduates before they are hired by your organization (i.e. increased automation, client-server computers, E-mail communications, etc.)?

Observations: Qualifications required of new college graduates prior to hiring, as measured by skills and abilities, are continuing to increase in surveyed organizations. New college graduates were expected to have increased computer literacy, word processing skills, desktop publishing, typing, and other basic computer competencies before they were considered for employment by these organizations.

Increased computerization (94) was occurring in most occupational categories of surveyed organizations, so more computer knowledge was considered mandatory for new college graduates hired. Among the job categories listed by surveyed organizations were client-server computers, personal computers at all workstations, computerized inventory distribution systems, on-line engineering design drawing, and automated production.

Other computer applications included comprehensive information systems, computer-aided design systems (CADD), computer auditing, voice mail communications, electronic mail (EMail), and FAX. Basic computer software skills are expected from new graduates (i.e. WorkPerfect, Lotus, etc.). As additional new technologies are used by employers, more technical skills will be required from new college hires.

Increased automation and technology (19) have reduced availability of career opportunities for job applicants with high school diplomas, as more positions are filled by college graduates. Robotics in production facilties, expanded product lines, and additional responsibilities attached to many career opportunities have increased the educational level required for adequate job performance.

Prior work experiences (7) and knowledge of the real business environment were requirements for a few employment opportunities available with surveyed employers. As an example, an employer mentioned direct sales experience as a requirement for available sales positions. In the words of this employer, "lean, mean, self-starters were needed."

Providing excellent customer satisfaction (13) (internal and external) was also a necessity, according to surveyed employers. In today's competitive market, foreign vendors are forcing U.S. manufacturers and industrial organizations to produce better quality products, to communicate more effectively, to create better marketing strategies, and to exhibit more refined interpersonal skills.

This changing industrial environment requires better skills from employees in all areas: interpersonal skills, personal people skills, excellent verbal skills, outstanding written communication abilities, and critical thinking (14). With these requirements as a focus, employers are expecting all new hires to possess these skills and abilities.

Constant change and increased competition were also demanding greater flexibility (9) from more creative managers. According to surveyed employers, an ability to adapt to change was absolutely necessary for new employees. They must be willing to accept a broader range of jobs and work tasks, relocate for promotions, and work overtime when necessary.

A stronger emphasis on teamwork (10), work groups, self directed work teams, team building, and coaching vs. supervision was expected by surveyed employers. The work environment in the last five years has changed to stronger support for employee involvement, a focus on total quality management, continuous improvement programs, and team-based design production systems, thus placing a greater importance on social skills.

Does your organization require **testing of new hires for drug use, AIDS, or alcohol level?**

	Response Categories												
	Always		Almost Always		Sometimes		Seldom		Never		Total Response		To-tal
	N	PCTN	N	PCTN	N	PCTN	N	PCTN	N	PCTN	N	PCTN	MEAN
Types of Testing Required for New Hires													
Drug Use	173	53.3%	4	1.2%	15	4.6%	6	1.8%	126	38.8%	324	100.0%	2.7
AIDS	15	4.7%	1	0.3%	4	1.2%	7	2.2%	288	91.4%	315	100.0%	4.8
Alcohol Level	63	19.9%	4	1.2%	19	6.0%	15	4.7%	215	68.0%	316	100.0%	4.0

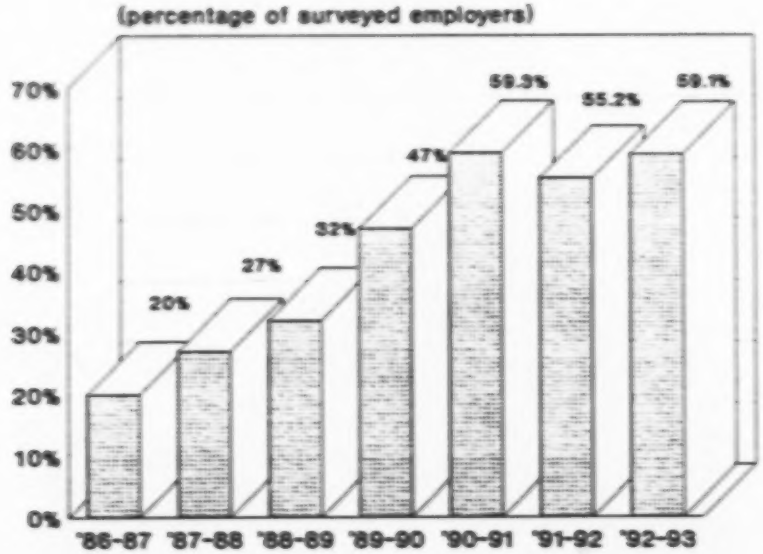
Observations: According to 324 employers responding, drug testing of new college graduates was required by 59.1% of the organizations. Included in this percentage were employers who "sometimes," "almost always," or "always" screened for drugs. Percentages of employers requiring drug testing in previous years of this study included 55.2% in 1991-92, 59.3% in 1990-91, 47% in 1989-90, 32% in 1988-89, 27% in 1987-88, and 20% in 1986-87.

Testing for alcohol levels among new college graduates was required by 27.1% of surveyed employers. This compares to 31.2% in 1991-92, 28.1% in 1990-91, 25% in 1989-90, 14% in 1988-89, and 9% in 1987-88.

AIDS testing of new college graduates was required by only 6.2% of the employers responding to this year's survey. Testing for AIDS in previous years included 2.1% in 1991-92, 5.4% in 1990-91, 4% in 1989-90, 3% in 1988-89 and 2% in 1987-88.

Some employers noted that these tests were only required after an offer had been extended. In other organizations, testing of all employees was randomly completed each year as part of their drug-free workforce policy.

Employers Requiring Drug Testing By Year



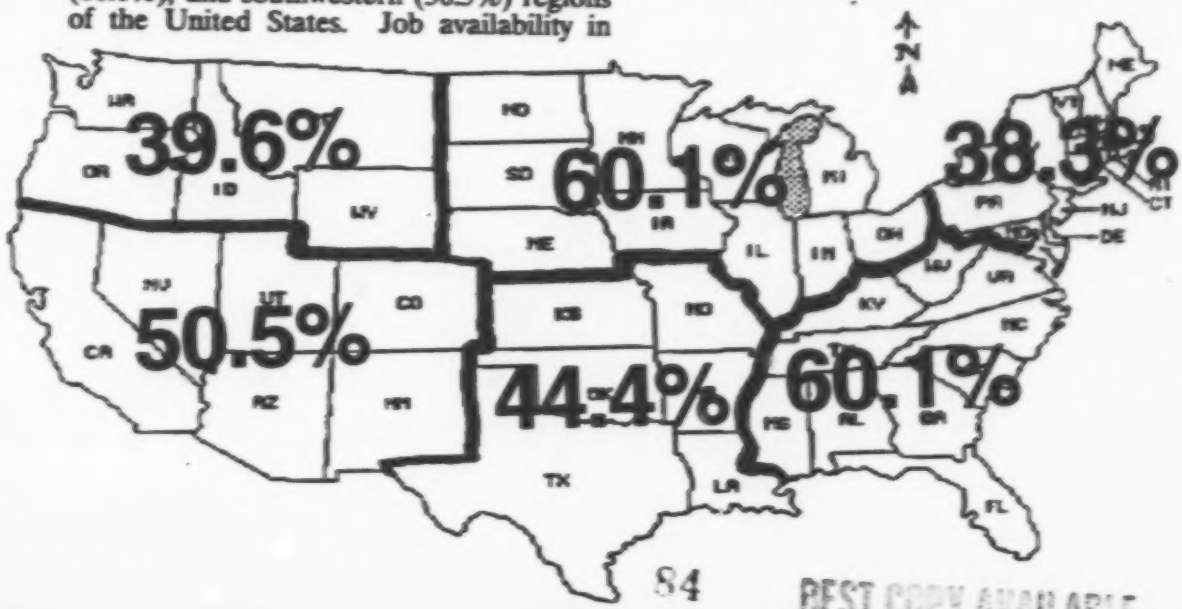
Based upon your experiences, what will be the **availability of employment opportunities for new college graduates this year** (1992-93) in each of the following geographical regions of the United States? Responses are listed by GEOGRAPHICAL REGION.

	Job Market Conditions This Year												
	Extremely High Availability		High Availability		Medium Availability		Low Availability		None		Total Response		Total
	N	PCTN	N	PCTN	N	PCTN	N	PCTN	N	PCTN	N	PCTN	MEAN
Geographical Areas													
Northeast	9	5.3%	15	8.8%	41	24.2%	76	44.9%	28	16.5%	169	100.0%	3.6
Southeast	6	3.6%	32	19.2%	62	37.3%	44	26.5%	22	13.2%	166	100.0%	3.3
Northcentral	16	7.2%	25	11.3%	92	41.6%	70	31.6%	18	8.1%	221	100.0%	3.2
Southcentral	2	1.2%	18	11.4%	50	31.8%	62	39.4%	25	15.9%	157	100.0%	3.6
Northwest	3	2.0%	10	6.9%	44	30.7%	47	32.8%	39	27.2%	143	100.0%	3.8
Southwest	10	6.3%	23	14.5%	47	29.7%	55	34.8%	23	14.5%	158	100.0%	3.4

Again this year, for the fourth consecutive year, only "medium" to "low" availability of employment opportunities for new college graduates was expected in any geographical region of the country, based upon the experiences and judgment of surveyed employers. For statistical purposes, any responses at the extremely high, high, or medium availability levels were included in these ratings.

This year (1992-93), receiving "medium availability" ratings were the southeastern (60.1%), northcentral (60.1%), and southwestern (50.5%) regions of the United States. Job availability in the "low" level was expected in the southcentral (44.4%), northwestern (39.6%), and northeastern (38.3%) regions of the country.

A year ago (1991-92), "medium" ratings were indicated for the northcentral (71.4%), southeastern (67.9%), southwestern (66.9%), southcentral (54.1%), and northwestern (50.2%) regions of the United States. Low availability of jobs for new college graduates was expected in the northeastern (42.3%) region of the United States.



BEST COPY AVAILABLE

INDEX

Academic Areas,
  Shortages- 23-26
  Starting Salaries- 34, 35
Acquisitions- 16-17
Advice for Those Who Cannot Find Job Opportunities- 20
Affirmative Action/EEO- 57
AIDS Testing- 62
Alcohol Testing- 62
Americans with Disabilities Act (ADA)- 59-60
Anticipated Hiring,
  This Year- 33, 39
  Shortages- 23-26
Background Checks- 53
Benefit Packages- 40-41
Campus Recruiting- 37
Campus Visits- 37
Career Fairs- 28
Career Goals- 20
Changes, Recruitment Practices- 28
  Job Market- 19
Compensation Plans- 40-41
Cooperative Education Students- 28
Cost of Recruiting and Hiring- 52
Deficiencies in Skills, Knowledge Areas- 56
Disabled Employees-7, 59-60
Divestitures- 16
Downsizing- 16-17, 36
Drug Testing- 62
Emerging Occupations- 38
Employees-
  Total- 4-5
  Overseas- 15
Employer Categories- 4-5
Employer Sizes- 4-5
Employers Surveyed- 4-5, 65+
Employment Market- 33, 39
Entrepreneurship- 20
Entry-Level Jobs-
Equal Employment Opportunity/ AA- 57
Forthcoming Shortages- 23-26
Foreign Nationals Hired,
  In United States- 12
  Overseas- 13
Geographical Locations- 63
Government Employment- 1-3, 9-14
Graduate School- 22, 54
Handicappers,
  Total Employed- 7
Impact of Layoffs- 8, 16-17, 36
Internships- 28, 31
International Employment- 15
Interviewing- 42-44, 45
Job Market- 19
Job Offers- 47-51
Job Openings- 33, 39
Job Search Techniques- 20
Layoffs, Salaried Employees- 8, 16-17, 36
  Impact on Hiring- 36
Leadership Activities- 55
Minorities
  Shortages- 26
  Total Hired- 9
Networking- 21
New Hires,
  Last Year- 1-3, 9-14
  Anticipated This Year- 1-3
  No Prior Work Experience- 11
New Occupations- 38
Non-Technical Graduates- 42, 47
Overseas Employment- 15
Outplacement Services- 36
Parachutes- 36
Placement Services- 28, 31-32, 37
Plant Closings- 16
Preparation Needed from College and University Experiences- 55
Prior Work Experience- 11
Recruiter Problems- 31-32
Recruitment Activities- 28, 30
Reorganization- 16-18, 36
Retirement Benefit Packages- 40-41
Salaried Employees,
  Total on Payroll- 4-8
  Overseas- 6
  With Handicaps- 7
Selected Colleges- 28
Severance Pay- 36
Sexual Harassment- 58
Shortages of Candidates- 23-26
Shortcomings of College Graduates- 56
Signs of Change- 19
Starting Salaries- 34-35
Takeovers- 16-17, 36
Technical Graduates- 42, 47
Testing for Drugs/ Alcohol/ AIDS- 63
Thank-You Letters- 46
U.S. Citizens Employed Overseas- 14
Women,
  Total Hired- 10
  Shortages- 25
Work Environment- 61
Work Experience- 20

EMPLOYERS RESPONDING
TO RECRUITING TRENDS 1992-93

-A-

A C Nielson Company
A Duda and Sons
AC and S
Acme-Clevland Corporation
Advanced Care Products
Aerojet Electrostyle
Aetna Life and Casulties
Agway Incorporated
Aim Executives Inc.
Air Product and Chemical Inc
Albertson's Incorporated
Alexander Hamilton Life Ins
Allegretti and Company
Allen Bradley Company
Allied Signal
Allied Signal Aerospace
Aluminum Co. of America
American Breeders Service
American Broach and Machinery
American College Testing
American Electric Power
American General Accident
American General Life Ins
American Institute of Business
American Management Systems Inc
American Electronic
American Family Insurance
American Frozen Foods
Amerisure Insurance
Ameritech Services, Inc.
Ames Laboratory
Amoco Corporate
Amoskeag Bank Shares
AMP Incorporated
Amplicon
Amstar Corporation
Amsted Industries
Anchor Continental
Anderson Consulting
Ann Arbor Police Department
Appleton Inns Inc.
Appleton Papers
Anheuser Busch
Applied Materials
Applied Physics Laboratory
APV Chemical Machinery Inc
Aquideck Data Corporation
ARA Business Dining Services
Archer Daniels Company
Argonne National Laboratory
Aristek Communication Inc
Arkansas Best Corporation
Armco, Inc.
Armstrong World Industries
Army Information Systems Comm.
Army National Technology Inc
Arthur Anderson and Co.
ASG Industries Incorporat ed
Ashland Oil Incorporated
Ashland Petroleum Company
AT Cross Company
American Telephone & Telegraph
Atlanta Gas Light Company
Auditor General's Office
Autolite
Avco Computer Services
Awrey Bakeries Inc.

-B-

Babcock and Wilcox Co.
Baker Hughes
Bakers Square Restaurant
Ball Memorial Hospital
Baltimore Police
Banc One Corporation
Bancorp Hawaii
Bank One-Dayton National
Bard Manufacturing Co.
Barton Aschman Association
Bath Ironworks
Battelle Columbus Operations
Baxter Healthcare
Bechtel Corporation
Bender Shipbuilding
Bendix/Oceanics Division
Bergan Mercy Hospital
Bessemer and Lake Erie
Bethlehem Steel Corp.
Big Wheel
Bil Mar Foods Inc.
Bishop Clarkson Memorial
Black and Decker Inc.
Black and Veatch
Blaw-Knox Rolls Division
Bloom Engineering Company
Bocknek Berger Ghers
Boeing Company
Bonne Bell
Brevard County Florida
BP Exploration of Alaska
Briggs and Stratton
Brigham's
Broad Incorporated
Broad Vogt and Conant
Brown Williamson Tob
Bultnyck and Company
Burgess and Niple Limited
Burns and McDonnell
Burns International Security

-C-

C ITOH Electronics
C J Gayfer and Company
Cairns and Stewart
Campbell Soup Company
Canteen Service Company
Career Research Systems Inc.

Caro Regional Mental Health
Carolina Eastman Company
Carpenter Technology
Carstab Products
Castner Knott
Caterpillar Incorporated
Catholic Medical Center
Catholic Social Services
Centennial Group
Centerior Energy
Centex Homes Corporation
Central Illinois Public Service
Ceredian Corp.
Champion International
Charleston Medical Center
Chemical Bank
Chem-Trend Incorporation
Chemical Technical
Chemineer Incorporated
Cherry-Burrell
Chicago & Northwest Transport
Chrysler Corporation
Chubb
CH2M Hill Company
Ciba Corning
Ciba-Geigy Corporation
Cigna Corporation
Cincinatti Bell Inc.
Clark Material Handling
Classic Corporation
Clinton Twp.
Colonial Williamsburg Foundation
Colorado State University
Columbia Gas Transport
Comdisco Incorporated
Comerica
Communications Satellite
Commercial Equipment Company
Commonwealth Edison
Conoco Incorporated
Consumers Power Company
Continental Insurance Company
Control Data Corporation
Convergent Technologies
Coopers and Lybrand
Copy Duplicating
Corning Incorporated
Cornwall Industries
Country Fresh Inc.
Countremark
Creative Solutions
Crowe Chizek & Co.
Cummins Engine Co.
Cummins Northwest
Cyclops Corporation
Cygna Energy Service
Cygna Group Inc.

-D-

Data General Corporation
Data Systems Network
Davey Tree Expert Company
David Michael and Company
Days Inn
Dayton Hudson
Dazey Corp.
Deere and Company
Dekalb-Pfizer Genetics
Delta Financial Corporation
Denny's Restaurant
Department of Agriculture
Department of Commerce
Depuy Incorporated
Detroit Edison Company
Devilbliss Industry Products
Difco R&D Center
Digial Equipment Corp.
Disneyland
Doreen Mayhew and Co.
Donnelley Corporation
Dow Chemical USA
Dow Corning Corporation
Dow Jones
Dry Storage Corporation

-E-

E I Dupont and Co.
E R Carpenter Company
E-Systems Incorporated
Eagle Electric Mfg.
Eastman Kodak Company
Economy Fire and Casualty
Elder-Beerman Stores
Electronic Data Systems
Electronic Realty
Electronics Boutique
Elliot Company
Emerson Power Transmission
Envirex Incorporated
Environmental Protection Agency
Ernst and Young
Essex Group Incorporated
Ethyl Corporation
Excel Corporation
Exxon Products Research Company

-F-

F Joseph Lamb Company
FAAC Incorporated
Falk Corp.
Famous-Barr Company
Farm Credit Service
Federal Bureau of Investigation
Federal Highway Admin.
Field Container
First Interstate
First National Bank of Cincinnati
First of America
Fishbeck Thompson CA
Flint Public Library
Flow Industries Inc.
Flour Daniel Inc.
Flexible Corporation, The
Ford Motor Company
Ford New Holland Inc.
Foxboro Co.
Frequency Engineering Laboratories
Frigidaire Company
Fuller Company
Fuqua Industries
Furnas Electric Company

-G-

Gab Business Service
Gallup-Mc Kinley Company
Gard Division Chamberlain
Gas Research Institute
Gehl Company
General Accounting Office
General Electric
General Mills Inc.
General Motors Corp.
General Public Utility
Geological Survey

Gilbert Robinson Inc.
Gold Kist Inc.
Goulds Pumps Inc.
Grande Shoe Company
Granite Construction Co.
Greenville Memorial Hospital
Grief Brothers Corp.
GTE Corporation
Guardian Industries
Gulf and Western

-H-

H J Heinz
H M Smyth
Harris Trust and Savings Bank
Hasselbring-Clark
Heinz USA
Hendrix and Dail Inc.
Henrico Company
Honeywell Inc.
Houston Industries
Houston's Restaurant
Hudson Engineering Corp.
Hughes Aircraft
Hunt Petroleum Corp.
Hunt-Wesson Inc.
Huron County Mental Health
Hutchinson Technical

-I-

IBM Corp.
IBP Inc.
Illinois Dept. Transportation
Illinois Farm Bureau
Inacomp Computer Center
Ingersoll-Rand Company
Ingham County Personnel
Innovative Housing
Insurance Service Office
INB National Bank
Intel Corporation
Internal Revenue Service
International Flavors
International Voluntary Services
ITT Aerospace/ Communications

-J-

J C Penney Co. Inc.
J I Case
Jackson County Cooperative Extension
Jackson Laboratory
James River Corporation
Jefferson Smurfit
Jet Propulsion Lab
John Richard Development
Johnson & Johnson
Johnson Controls Inc.
Juvenile Court Services

-K-

Kansas City Power and Light
Kansas Dept. of Transportation
Kaufmann's Department Store
Kimberley Clark Corp.
Koch Refining Co.
Kraft Inc.
Kustom Signals Inc.

-L-

L D Hepfer and Company
Lansing Parks and Recreation
Lazarus Department Stores
Lear Siegler Seating
Lexmark International
Liberty Mutual Insurance
Lincoln Electric Company
Lippert Components
LNR Communications Co.
Lockwood Greene Engineering
Loral Electronic Systems
Los Angeles, City of
Louisiana Land
LTV Aircraft Products
Lutron Electronics Inc.

-M-

3 M Corporation
Magnetic Electric
Manchester, The
Manufacturers Bank N A
Manugistics
Marathon Oil Co.
Marelco Power Systems
Marine Corporation
Mark Twain Bancshare
Market Strategies
Marriott Corp.
Mars Inc.
Marsh Products
Masland Carpets
Masonite Corp.
Maxus Energy Corp.
Mayo Clinic
McDermott Inc.
McDonnell Douglas Corp.
McLouth Steel Corp.
McMahon & McDonald
Mead Data Central
Mears/CPG Inc.
Medical Center Hospital
Mental Health Center
Merrimack Valley
Metro Edison Company
Michigan Biotech Institute
Michigan Farm Bureau
Michigan State Dept. of Transportation
Michigan Dept. of Corrections
Michigan Dept. of Natural Resources
Michigan Education Association
Michigan Insurance Bureau
Michigan Office of the Auditor General

Michigan State Police
Micro-Rel Inc.
Mission Point Resort
Missouri Highway & Transport
Mobay Corporation
Montgomery Ward and Co.
Moore Products Company
Moorman Manufacturing Company
Morton F Plant Hospital
Morton International
Motorola Corp.
Mountain Company Inc.
MSI Systems Corporation
MSU House and Food Services

-N-

Nabisco Company
Nalco Chemical Company
NASA
NASA/Lewis Resource Center
Nastech Manufacturing Inc
National Bank, Detroit
National Distillers
National Futures Association
National Farmers Organization
National Multiple Sclerosis
National Semiconductor
National Starch and Chemical Corp.
Naval Facilities
Naval Undersea Warfare
NCR Corp.
NEC Technologies Inc.
Nestle Beverage Corp.
Network Systems
New York State Insurance
New York Telephone
Nexcen
Nicor
NOAA/Officer Corps
Nordson Corporation
Norwich Eaton Phamacy

-O-

Occidental Chemical Corp.
Office of Auditor General
Old Kent Bank
Olde Discount Corporation
Olin Aerospace
Olofsson Corp.
Omaha Public Power District

-P-

Pacific Electro Dynamics
Pacific Power and Light
Packaging Corporation of America
Paper Converting Machinery
Pasqinelli Construction Company
Pennsylvania Electric Company
Pennsylvania Power & Light
P H Glatfelter Co.
Picker International
Pillsbury Company
Pioneer Wear Inc.
Pittsburgh National Bank
Plante and Moran
Playtex Family Products
Premier Autoware
Prime Metals
Prince Corp.
Principal Financial Group
Progressive Corp.
Prudential Financial Services
Prudential Insurance Co.
Public Service-Indiana

-Q-

Quaker Oats
Quantum Chemical Corporation

-R-

R J Reynolds Tobacco
R & G Mental Health
Radio Shack
Ralston Purina
Rand Corporation
Raychem Corporation
Redman Industries
Region II Communications Action
Reynolds and Reynolds
Rich Products
Riley Consolidated
Riverside County
Robert Bosch Corporations
Robertson Brothers
Rocket Research Company
Rogers Corporation
Ryan Homes Incorporated

-S-

S M S Incorporated
Saginaw County Mental Health
Salem Hospital
San Antonio Public Service
San Diego Gas and Electric
San Diego Personnel Department
Sandia National Laboratories
Santa Fe South PA
Santee Cooper
Schippers Kintner
Seaboard Seed Company
Sears Roebuck and Company
Senior Civil Engineering
Shell Oil Company
Shemin Nurseries
Sherwin Williams Company

Shopko Stores Inc.
Siemens Medical Systems
Simplified Account
Slakey Brothers Inc.
Snap-On-Tools
Sonoco Products Co.
Social Security Administration
South Central Bell
Southeastern Michigan Gas
Southern Company Services
Southern Nevada Memorial Hospital
Southwestern Company
Southworth International
Southwestern Public Services
Spartan Electronics
Sperry Flight Systems
Spiegel Inc.
Springs Industries
SPS Technologies
St. Francis Medical Center
St. Paul Companies
Stambaugh Thompson
Staples Incorporated
Star Bank Cincinnatti
State Personnel Board
Strawbridge Clothier
Stromberg-Carlson
Stryker Corporation
STSC, Incorporated
Superior Electric
Sybra, Incorporated
Syracuse Research Company

-T-

Technica Incorporated
Tectonics Incorporated
Telerate
Telex Computer Products
Telex Corporation
Temstar Incorporated
Tennessee Valley Authority
Texaco Incorporated
Texas Commerce Bank
The Bon Marche
The Timken Company
Thiokol Corporation
Thompson Consumer Electric
Toledo Scale
TRW Electronics and Design
Turner Construction

-U-

Uantum Chemical Corp.
Union Bank
Union Camp Corporation
Union Electric
United Hospital
United Illuminating
United Telephone Co. of Ohio
United Telephone Systems
University of Maryland
University of Michigan-Medical Center
Urban Science Applications
U.S. Air Force
U.S. Air Force Flight Testing
U.S. Air Force Logistics
U.S. Army
U.S. Army- Nurse Corps
US Car Company
U.S. Coast Guard
U.S. Dept. of Agriculture- Office of General Audit
U.S. Department of Defense
U.S. Energy Reserve Development Admin.
U.S. General Accounting Office
U.S. Marine Corps
U.S. Navy
U.S. Office of Personnel Management
US Testing Company

-V-

Vanden Bergh Foods
Vermeer Manufacturing Company
Veterans Administration
Village of Wilmette
Vista Chemical Company
Vista Research

-W-

W R Grace Co.
Wade Trim and Association
Walco Chemical Co.
Wallick Company
Warner Lambert
Washington- Personnel
Washtenaw County Roads
West Company Incorporated
West Pennsylvania Power Company
Westinghouse Electronic
Westavco Corporation
Wickes Lumber Company
Wilkerson Corporation
Wilkie Lawn Services
Winn Dixie Stores
Wirtz Manufacturing Co.
Wisconsin Electric Power
Wisconsin Gas Company
WW Engineering and Science

-X-

Xontech Incorporated

-Y-

Yeo and Yeo
Yosemite Park

-Z-

Zelenka Evergreen Nurseries
Zenith Electronics